

# Drive Down Manufacturing Costs with AWS

## Reduce Cost of Goods Sold and Improve Yield

The next revolution in manufacturing is here. But consumer packaged goods (CPG) companies are still challenged to squeeze out additional productivity, increase asset utilization, and improve quality while lowering costs. Most companies struggle with outdated manufacturing plants and rely on spreadsheets with limited analytics or market intelligence. Each plant may generate up to a terabyte of data each day, and companies are seeking ways to turn that raw data into manufacturing insights to optimize production.

AWS understands how to help CPG companies reduce the cost of goods sold and improve manufacturing yields. For over 25 years, Amazon.com has manufactured and distributed billions of products with cutting-edge automation, machine learning (ML), artificial intelligence (AI), and robotics with AWS at its core.

## Transform Manufacturing Operations with AWS

Transform your manufacturing operations with the most comprehensive and advanced set of cloud solutions available today, while taking advantage of the highest level of security. AWS allows you to focus your resources on optimizing production and improving operational efficiencies across the value chain—not on maintaining the IT infrastructure to make it happen.



### Improve Quality

Manufacturing companies collect vast troves of process data making it difficult to identify insights because of common challenges, like disparate data sources, stranded data, and ownership issues. AWS enables you to pull all your data sources together via a data lake and apply intelligence for real-time, predictive analytics.



### Reduce Downtime

Manufacturers can use the same capabilities to improve machinery uptime that they use to increase quality. Combine siloed machine data from production lines and plants into a common data lake and leverage ML and AI capabilities to provide real-time, predictive analytics on your production equipment.



### Enhance Security

AWS customers benefit from a core infrastructure designed to meet the requirements of the most security sensitive industries like healthcare, financial services, and even government applications. Build on the most secure global infrastructure to mitigate risk without compromising time to market, scale, and business agility.

“We are now able to capture all this real-time data and get visibility into the root causes of production issues. We now have a lot more confidence in the data, and we can digitize the analysis.”

– Edith Harmon, VP of Manufacturing Innovation at New Balance

## The Industry's Largest CPG Ecosystem at Work

We know how important your partners are and the critical solutions they provide. That's why we've created the industry's largest ecosystem—thousands of partners who deploy, extend, and enhance those capabilities for even greater value. We believe a big part of our job is ensuring that your partners and solutions work better together.



## Create the Smart Factory

AWS helps CPG manufacturers create a “smart factory” using data to optimize production planning, execution, and product quality. With AWS, you can break down silos and create a digital twin of your manufacturing environment to capture production data in real time and use predictive analytics to optimize yield and quality while driving down IT infrastructure costs and energy consumption.



### Real-time Defect Detection

Capture and analyze production data in real time to reduce defect rates up to 49%. AWS helps CPG companies create a digital twin of their plants, capture production data in real time, and make better decisions to improve quality.



### AI-driven Production Optimization

Use ML and AI capabilities to decrease unplanned downtime by 48%, improve average OEE by 16%, and increase manufacturing yield. AWS helps companies capture, analyze, and visualize disparate plant data to predict production problems before they occur so you can optimize your manufacturing process.



### Worker Safety & Productivity

Keep your organization healthy, safe, and productive with solutions offered by AWS and our network of industrial partners. Monitor employee health to meet pandemic guidelines, reduce errors with digital job aids, automate manual workflows, enhance productivity, and reduce manual processing and documentation.



### Manufacturing Energy Management

AWS helps CPG companies monitor and analyze manufacturing operations to reduce energy costs—including water usage, energy consumption, transportation costs, and greenhouse gas emission—up to 18% and understand end-to-end carbon emissions. Aggregate data from your manufacturing, supply chain, and transportation networks; get near real-time monitoring and analytics using AI and ML to quickly identify opportunities; and track the impact of these initiatives on your sustainability efforts.

## Major CPG Brands Drive Success with AWS

### Coca-Cola İçecek

Coca-Cola İçecek (CCI) worked with AWS to implement IoT solutions to optimize its clean-in-place (CIP) process. Within four months of deployment, CCI identified over 30 improvement opportunities that resulted in annual savings of 20% on electricity and 9% on water. Additionally, CCI estimates it will save 34 days of processing time per year using the digital twin solution, which will reduce overhead costs and further increase efficiency. Read more [here](#).

### GP Georgia-Pacific

Georgia-Pacific used AWS-based advanced analytics solution to eliminate 40% of parent-roll tears, reduce 30% of war material waste, reduce chemical usage to create wood pulp, and improve overall yields. They can now predict equipment failure 60-90 days in advance to keep more than 150 converting lines in operation. “By reducing paper tears, we have increased profits by millions of dollars for one production line.” Read more [here](#).

## Learn more, get started, and stay ahead.

Get started today with CPG manufacturing solutions from AWS:

- Visit our [AWS CPG Overview page](#).
- Visit our [AWS CPG Manufacturing page](#).
- Learn about modernizing your manufacturing facility with a [digital twin](#).
- Ask how AWS can support your CPG business transformation with manufacturing solutions. [Contact](#) your AWS account team today to get started.