



## DXC and AWS Launch Smart Factory as a Service for CPG Industry

**Smart Factory technology is revolutionizing  
the way CPG companies manufacture,  
improve and distribute their products**

CPG organizations have learned to consistently innovate and deploy new ideas rapidly through optimizing supply channels, identifying consumer trends, and utilizing various marketing and product positioning strategies at retail locations. This responsive approach to the market has helped to increase market share, consumer traction, and profitability across brands and products.

In today's market with expanding direct to consumer channels, the same attention to rapid innovation and responsiveness is now required through the manufacturing operational processes to ensure and support product availability in the supply channels, minimize production disruption, lower costs, and optimize quality control for product safety requirements.

These smart factories are equipped with advanced sensors, embedded software and robotics that collect and analyze data and allow for better decision making. Even higher value is created when data from production operations is combined with operational data from ERP, supply chain, customer service and other enterprise systems to create whole new levels of visibility and insight into operational processes.



This technology leads to increased automation, predictive maintenance, self-optimization of processes, and increased responsiveness to customer and industry requirements.

# The Opportunity for Manufacturing Data Innovation



A single production line can generate more than 70 terabytes of data per day—yet most data remain unanalyzed. The AWS and DXC Smart Factory as a Service embeds the latest next level technologies like AI, IOT integration, and security to efficiently extract value and act on these untapped data components.

Analyzing the large amounts of data collected from sensors on the factory floor ensures real-time visibility of manufacturing assets and can provide tools for performing predictive maintenance in order to minimize equipment downtime in the factory.

Using IoT devices in smart factories leads to higher productivity and improved quality. Replacing manual inspection with AI-powered visual insights reduces manufacturing errors and lowers costs. By applying machine learning algorithms, manufacturers can detect errors immediately.

## The Cost of production disruption

How much does factory production disruption cost? For almost nine in ten firms surveyed, an hour of factory disruption could be as much as USD 300,000. And one in four say that a single hour could cost upward of USD 1 million to as much as USD 5 million. (Source: ITIC)



## Why utilize AWS and DXC for your Smart Factory?

Every company operational system needs a comprehensive platform to automate business processes and to enable and integrate transactions, innovation and manufacturing processes — and AWS IOT Smart Factory platforms are based on the cloud and utilize open APIs that orchestrate the exchange of data between systems.

Industry leaders that effectively implement operations technology service management benefit from consistent architectures that are easy to scale and maintain while allowing for local innovation and flexibility. With Smart Factory as a Service companies get a proven Smart Factory platform with the expertise and services to effectively deploy and support the system.

# Smart Factory as a Service

Smart Factory applications rely on the cloud for processing, analytics, storage, and machine learning, but also need to do some processing, like ML inference, close to where data is generated to deliver intelligent real-time responsiveness, and reduce the amount of data transferred.

Develop industrial applications for predictive quality, maintenance, and operations monitoring with AWS IoT and Machine Learning services, and a combination of infrastructure services deployed on-premises or at the edge, like AWS Outposts and AWS Snowball. Securely collect and analyze manufacturing data at the factory edge to optimize processes and improve safety, productivity, and quality.

Power innovative processes and optimize production at global scale. Leverage DXC Consulting Services, AWS IoT platforms, edge computing, and advanced analytics tools to improve manufacturing operations.

## CPG Smart Factory ROI Components

- » Lower variable operation costs
- » Increase Production Efficiency
- » Minimize Production Disruption
- » Implement Product Safety Quality Control Processes

Customers  
lower costs  
by 15%



Get the right tools to capture, analyze, and utilize data to inform new ways to drive efficiency and reduce costs. AWS and DXC help your Smart Factory improve business operations by:

- » Enabling access to disparate plant data to improve Overall Equipment Effectiveness
- » Adding AI and Machine Learning for real-time predictive analytics capabilities
- » Creating a disaster recovery plan in the cloud



# Platform Components

## Device software

Connect your devices and operate them at the edge.



### FreeRTOS

FreeRTOS is an operating system for microcontrollers that makes small, low-power edge devices easy to program, deploy, secure, connect, and manage.



### AWS IoT Greengrass

AWS IoT Greengrass is software that lets you run local compute, messaging, data caching, sync, and machine learning inference capabilities on connected devices in a secure way.

## Connectivity & control services

Secure, control, and manage your devices from the cloud.



### AWS IoT Core

AWS IoT Core lets connected devices easily and securely interact with cloud applications and other devices.



### AWS IoT Device Defender

AWS IoT Device Defender continuously monitors and audits your IoT configurations to make sure that they aren't deviating from security best practices.



### AWS IoT Device Management

AWS IoT Device Management makes it easy to securely register, organize, monitor, and remotely manage IoT devices at scale.

## Analytics services

Work with IoT data faster to extract value from your IoT data.



### AWS IoT Analytics

AWS IoT Analytics makes it easy to run sophisticated analytics on massive volumes of IoT data.



### AWS IoT SiteWise

AWS IoT SiteWise makes it easy to collect, organize and analyze industrial data at scale.



### AWS IoT Events

AWS IoT Events makes it easy to detect and respond to events from large numbers of IoT sensors and applications.



### AWS IoT Things Graph

AWS IoT Things Graph makes it easy to connect different devices and cloud services to build IoT applications.

## Services and Offerings



### SFaaS Design and Pilot

Comprehensive services allow you to easily implement prototype solutions at specific locations for specific ROI criteria



### Application Development

From initial APIs at the factory to integration with ERP and CRM systems, our consultants help develop an enterprise solution to meet your requirements.



### Production Deployment

Project management, installation, configuration and deployment services in more than 195 countries to handle your rollout



### Support Services

Full set of support services, maintenance services, and staffing to meet your requirements