

DRIVING EFFICIENCY IN GLOBAL MANUFACTURING

SMARTER, FASTER TROUBLESHOOTING ACROSS GLOBAL FACTORY LINES

BACKGROUND/INTRODUCTION

A leading global consumer goods company operates a vast network of manufacturing plants worldwide, producing essential products that touch the lives of billions daily. With a presence in over 190 countries and a diverse portfolio of brands, the company is committed to delivering high-quality goods while driving sustainable growth.

Maintaining operational efficiency across production lines is critical to ensuring product quality and meeting consumer demand. As the company expands its global footprint, leveraging advanced technologies to enhance manufacturing processes becomes increasingly vital.



Manufacturers leveraging IoT and analytics typically see 10–25% productivity gains and 10–40% lower maintenance costs⁽¹⁾.

AT A GLANCE

Industry: Global Consumer Goods Employees: 100,000+ Globally Objectives:

- . Gain real-time visibility into machine stoppages across global factory lines
- . Reduce downtime by accelerating root cause analysis
- . Eliminate reliance on manual investigation methods
- Centralise production event data and video for faster decisionmaking
- . Enable scalability across different factories, machine types, and camera systems
- Improve overall production efficiency through proactive monitoring.

Products:

- . Azure IoT Edge
- . Azure Blob Storage
- . Power Bl

THE CHALLENGE

Even with established processes, unexpected machine stoppages can significantly impact production—reducing output, delaying deliveries, and affecting overall efficiency.

Traditionally, identifying the root cause of these stoppages relied on manual investigation, which involved analysing logs, inspecting machinery, and piecing together clues. While this approach was effective in many cases, it could be slow and sometimes inconclusive, leaving room for improvement.

To overcome these limitations, the company required a solution that could quickly detect stoppages, provide a clear view of what occurred, and scale across various factory setups worldwide.

30%

Companies digitising production processes report up to 30% faster issue resolution and 25% fewer quality-related losses⁽²⁾.

THE SOLUTION

To address this, we partnered with the company to create a more efficient approach for monitoring production and responding to stoppages. The solution combines real-time machine monitoring, automated video capture, and cloud technology into a single, scalable system.

Here's how it works:

- Real-time monitoring: Machine activity is tracked continuously, with stoppages flagged immediately.
- Automatic video capture: The system automatically records relevant footage, showing exactly what occurred before and during the production line stoppage.
- Optimised storage: Full video is stored locally on the Network Video Recorder (NVR) server. Only short snapshots are copied to the cloud to optimise data throughput.
- . Centralised analysis: All process data and selected video clips related to production stoppages are securely stored in the cloud and accessible through dashboards, providing instant visibility across factories. Full video recordings remain available locally on the PVR systems.

By integrating data and video in this way, the system provides a clear, real-time view of production events while remaining efficient, scalable, and easy to deploy in new factories.



THE IMPACT

The solution has transformed production line management:

- . **Faster resolution of stoppages:** Issues that once took days to diagnose can now be addressed in minutes.
- Higher production uptime: Quicker insights reduce delays and keep operations running smoothly.
- Proactive operations: Recurring issues are identified and addressed before they escalate.
- Scalable across factories: The system adapts to different machines, lines, and layouts.
- Unified, secure access: All insights are centralised, providing a single source of truth across sites.

A STEP FORWARD IN MANUFACTURING

By combining real-time monitoring, video, and cloud technology, the company strengthens its ability to make data-driven decisions across its production network.

Processes are now proactive and visual every stoppage becomes an opportunity to improve efficiency and maintain consistent, high-quality production.

