

Challenges on the Manufacturing Floor

Imagine a typical day on the manufacturing floor—production halts due to a technical glitch. Technicians scramble to find the right documentation, facing complex issues with

-  Fragmented knowledge across multiple systems and documentation
-  High dependencies on specialized experts (SMEs)
-  Increased costs and production delays due to extended downtimes

Each delay underscores the urgent need for smarter, faster support solutions to reduce equipment downtime.



Amazon Q for Maintenance Field Assistance

Leverage  Amazon Q for Business – AWS’s GenAI Assistant for manufacturing field operations. By integrating enterprise data sources such as manuals, repair logs, and service bulletins, It delivers instant access to critical maintenance information and real-time troubleshooting guidance. Technicians can resolve issues faster without navigating disparate systems and documentation that minimizes downtime. With Amazon Q for Business, manufacturers ensure seamless production and maximize operational excellence.

Features



Customized to your manufacturing processes and systems



Use natural language commands and voice-based interface for intuitive troubleshooting



Quickly retrieve past maintenance information and insights from similar incidents

Benefits



Maximize Asset Uptime

Reduce downtime with advanced troubleshooting and repair guidance



Minimize Knowledge Gaps

Enable new technicians to perform efficiently with experienced staff



Enhance Workplace Safety

Step-by-step support aligning with safety protocols and avoiding hazards

Customer Success Story

GenAI Enabled Chatbot for Maintenance Technicians



Problem

Maintenance technicians at a leading multinational semiconductor manufacturer faced challenges in efficiently retrieving information from over two years of historical work order data stored in Xsite, leading to increased downtime, delayed issue resolution, and reduced productivity.



Solution

- Implemented Gen AI-powered chatbot for technicians
- Support natural language queries for faster and more accurate diagnostics
- Automate data retrieval and simplify technical manual summaries
- Provides instant, real-time access to historical work order data



Business Impact

- **50%** faster access to past orders by reducing search time
- **25%** reduction in equipment downtime
- **~70%** accuracy in response generation

Get started with Quantiphi

Solution walkthrough: Experience the capabilities of our GenAI solutions firsthand with a customized demo

Schedule a discovery session: Connect with our GenAI experts to discuss your business challenges and requirements.

Gen AI build: Get a GenAI Prototype built as per your requirement

Reach out to



Jim Keller,
AWS Global CEO,
 james.keller@quantiphi.com
aws.gtmgenai@quantiphi.com

