

The recall that didn't have to happen: When traceability becomes liability

Real-time visibility into product provenance and manufacturing supply chain incidents turns weeks of chaotic investigation into minutes, protecting brand, margin, and customer trust





When the investigation takes longer than the damage

A critical component fails in the field. Phones ring in the quality department. Minutes matter. Which products are affected? Where did the component come from? How many customers possess the defective unit? Without answers, worst-case assumptions take hold: broad, expensive recalls that damage brand reputation, trigger customer penalties, and drain margin.

A manufacturer with product traceability answers these questions in minutes. They pinpoint exactly which products contain the failed component, identify the exact supplier batch, locate every customer affected, and initiate a targeted response. The recall that could have cost \$20 million narrows to \$2 million in customer communication and focused remediation.

This gap between investigation-driven recall and intelligence-driven recall separates resilient manufacturers from those that react in crisis. The stakes are undeniable. According to ETQ analysis of 2025 recall data, product recalls typically cost firms \$10 million to \$50 million in direct expenses such as consumer reimbursements, scrap, rework and warranty costs, plus broader impacts from reputational damage, supply chain disruption, and legal exposure.¹ In the automotive sector, individual recalls routinely exceed \$100 million, with Ford alone setting aside \$4 billion in warranty reserves to cover escalating recall costs.²

Beyond cost, response speed matters. Research from Cambridge Judge Business School shows that geographic distance between supplier and manufacturer extends recall response time significantly, as firms hold larger inventory buffers and struggle to pinpoint affected goods across dispersed distribution networks.³ Recall response delays measured in weeks or months amplify regulatory exposure, customer dissatisfaction, and brand damage.

Meanwhile, 75% of manufacturers reported experiencing at least one product recall in the past five years, with more than 312 recalls issued in just the first seven months of 2025.⁴ The recall environment has become the new normal, not an exception. Organizations that invest in traceability readiness reduce recall-related costs by up to 50% compared to those caught unprepared.⁵

1 ETQ, *The Largest Consumer Product Recalls of 2025*, 2025

2 Leaders.com, *The Cost Of an Auto Recall*, 2024

3 Cambridge Judge Business School / JBS Insight, *Recall Response Time*, 2023

4 ETQ, *The Largest Consumer Product Recalls of 2025*, 2025

5 Insurance Edge, *The Cost of Product Recall Isn't Just Rising, It's Rocketing*, 2025

Critical gaps driving uncontrolled recall costs

The product journey is invisible across suppliers and distribution

Raw materials flow from suppliers into manufacturing, finished products move through distributors and retailers to customers, yet many organizations lack visibility into what happens at each step. Which supplier provided component XYZ? What conditions did the product experience in transit? Which batch was affected by a temperature excursion? Without this data, investigation teams manually reconstruct the journey, losing hours or days while the recall spreads uncontrolled.

Affected customer and inventory location are unknown until it's too late

A defect is discovered, but identifying every customer who possesses the affected product requires manual record searches across invoices, shipment logs, and customer orders. Products sit on warehouse shelves and in customer facilities, unidentified. Broad recalls ensure no product is missed but create massive unnecessary replacement costs. Precise traceability enables targeted recalls that reach only affected customers, minimizing unnecessary disruption.

Root cause analysis hampered by fragmented supply chain data

Quality teams cannot easily correlate production defects with supplier batch information, manufacturing conditions, or component sourcing dates. Root cause investigation becomes a guessing game supported by incomplete data. Without understanding where the problem originated in the supply chain, manufacturers risk repeating the same defect in future production runs or failing to identify systemic supplier quality issues.





Customer success insight:

A global automotive parts manufacturer implemented end-to-end product traceability using IoT sensors and supply chain integration. When a critical component defect was discovered, the organization identified affected products within minutes, located exact customers, and executed a targeted recall affecting 2,000 units instead of 50,000. Direct recall costs dropped from an estimated \$15 million to under \$2 million.⁸

Traceability and IoT as risk prevention

OpenText envisions [manufacturers operating with complete visibility](#) into product provenance and supply chain incidents from raw material through customer hands. Real-time tracking of environmental conditions, supplier quality events, and inventory location enables early detection of potential defects before they reach end users. When incidents occur, organizations respond with precision: identifying exactly which products are affected, pinpointing root causes in minutes rather than weeks, and communicating with only the customers who need to act.

This vision rests on three foundational capabilities that transform recall response from crisis management to controlled action:

End-to-end product visibility across your supply network

Integrate data from suppliers, manufacturing operations, logistics partners, and distribution channels into a unified platform that shows every product's journey from raw material to customer. Product traceability is established through business events that record how materials, components, and finished goods are created, packed, shipped, and transferred across partners, so many recalls can be resolved using event-level traceability data alone (for example, ASNs, EPCIS events, and batch-to-container mapping). IoT then complements this foundation by contributing physical condition and state data wherever environmental risk exists, enriching the digital record with temperature, shock, or location telemetry when needed. Integration with your multi-enterprise trading network ensures that partner data flows automatically into this traceability backbone without manual handoffs, so organizations see their extended product ecosystem in real time.⁶

Rapid identification of affected products and customers

When an incident occurs, query the traceability system to instantly identify all products containing a defective component, all customers who received those products, and their exact location. Instead of issuing broad recalls that affect millions, issue targeted recalls that reach only the hundreds or thousands affected. Response time collapses from weeks to minutes. Recall scope shrinks by orders of magnitude. Costs drops with precision.⁷

Automated intelligence for root cause and prevention

Embed AI agents that correlate production data, supplier information, environmental conditions, and quality events to surface root causes automatically. Instead of manual forensics, conversational AI helps quality teams ask: "Show me all products from Supplier A that experienced temperature excursions above 30°C during shipment" or "Which customers received products manufactured on the date quality escaped that defect?" Intelligence flows without human investigation overhead.

⁶ OpenText, *7 Use Cases for IoT and Traceability Top Reasons, 2024*

⁷ Rockwell Automation / Plex, *IoT Traceability Software Eliminates Surprises in Manufacturing, 2022*

⁸ OpenText, *Product Traceability, 2024*

Business outcomes: Cost prevention through visibility

Organizations that deploy comprehensive product traceability and IoT monitoring realize measurable improvements across recall management, supply chain efficiency, brand protection, and regulatory compliance:

Up to 50 percent reduction in recall-related costs

Recall readiness through traceability investment cuts costs dramatically. Organizations avoid broad, unnecessary recalls by pinpointing affected products. Regulatory response time improves. Legal exposure diminishes. Precise targeting means customers experience minimal disruption, preserving brand equity and customer satisfaction.⁹

Minutes instead of weeks for root cause identification

End-to-end visibility into supplier batch data, manufacturing conditions, and environmental monitoring enables automated root cause analysis. Quality teams identify whether a defect originated with a specific supplier batch, a production line malfunction, or a logistics incident. Corrective action accelerates when root causes are clear.¹⁰

Pinpoint customer impact instead of mass recalls

Real-time product location tracking and customer order data enable targeted recalls that reach only affected customers. Instead of issuing recalls affecting millions of units, organizations can target thousands. Unnecessary replacements disappear. Customer satisfaction improves. Regulatory scrutiny decreases when response is proportional and precise.¹¹

Counterfeit and grey market detection

Supply chain integration detects products entering unauthorized distribution channels in real time. QR codes enable customer verification of authenticity at the point of sale. Brand protection becomes proactive rather than reactive, preventing counterfeit-related liability and IP damage.¹²

Supply chain incident prevention

Continuous monitoring of environmental conditions, supplier quality events, and logistics status enables early detection of problems before defects emerge. Temperature excursions are flagged during transit. Supplier quality degradation triggers alerts. Issues are addressed on route instead of after products reach customers.¹³

Regulatory compliance and audit readiness

Complete digital traceability provides regulators and auditors with immediate access to provenance, environmental history, and quality records. Compliance becomes provable rather than aspirational. Investigation timelines compress. Regulatory penalties diminish when response is swift and documented.¹⁴

9 Insurance Edge, *The Cost of Product Recall Isn't Just Rising, It's Rocketing*, 2025

10 OpenText, *Product Traceability*, 2024

11 Rockwell Automation / Plex, *IoT Traceability Software Eliminates Surprises in Manufacturing*, 2022

12 OpenText, *7 Use Cases for IoT and Traceability Top Reasons*, 2024

13 Rockwell Automation / Plex, *IoT Traceability Software Eliminates Surprises in Manufacturing*, 2022

14 OpenText, *Product Traceability*, 2024

Next steps: Time to analyze your current situation

Begin by assessing your current recall readiness and identifying high-risk gaps:

- **Traceability readiness assessment:** Map your current visibility across suppliers, manufacturing, logistics, and customers. Identify data gaps and integration bottlenecks that slow recall response. Quantify the cost impact of your last significant quality incident or recall.
- **Supply chain partner integration planning:** Evaluate which suppliers and logistics partners need to participate in real-time traceability sharing. Develop an integration roadmap using pre-connected trading networks to accelerate onboarding.
- **IoT deployment pilot for critical products:** Identify your highest-value or highest-risk product lines. Deploy RFID tags, sensors, or QR codes on a pilot batch to demonstrate how environmental monitoring and location tracking enable early incident detection and rapid response.

Why OpenText?

OpenText delivers the only comprehensive platform that unifies product traceability, IoT orchestration, and B2B supply chain integration to address the full scope of recall prevention and response. Unlike point solutions focused on a single layer, OpenText connects:

- Complete supply chain integration through OpenText™ [Trading Grid](#).
- Real-time [IoT monitoring](#) across the product lifecycle.
- AI-powered conversational intelligence for rapid response.
- Proven recall response success.
- While not all recalls can be avoided, organizations with strong traceability and monitoring dramatically reduce recall scope, duration, and impact, transforming recalls from brand-threatening crises into controlled, auditable events.

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