



Whitepaper

Supplier Quality is Only as Strong as Your Weakest Link

As a company's supplier list grows, so does the looming risk of a supplier quality failure. With even one recall able to decimate stock value and brand

reputation, it's up to manufacturers to proactively manage supplier quality—or face the eventual consequences.

Brand Value and Industry Reputation at Risk

Hardly a day goes by that consumers don't hear about a new recall of products putting their lives at risk.

Nationwide recalls involving millions of pounds of food at big-name retailers. Faulty airplane parts that could fail and damage an aircraft in midair. Airbags exploding shrapnel at the passengers they're supposed to protect in a crash.

These recent news stories all share a common thread, and that is defective products that originated with just a single supplier.^{1,2,3,4} While the supplier's name is sometimes publicized, more often than not it's the brands like Boeing and even Honda—a company built on its quality reputation—taking the hit.

Beyond recall costs, which can total millions (or even billions), there's the larger risk to a company's public perception to consider. A recall can damage an entire industry when companies can't accurately identify who's responsible for a supplier quality incident, making it hard to track the full extent of defective products. The result is an ever-expanding recall, more negative headlines and eroding trust in the industry.

The lesson for manufacturers: no matter how well you think you manage quality in your organization, supplier quality is only as strong as your weakest link.

This paper examines how supplier quality risks are growing for manufacturers today, why suppliers are a critical part of the quality journey and what companies can do to strengthen every link in their supply chain.

Growing Supply Chains Mean Growing Quality Risks

Across a broad spectrum of industries, global supply chains are longer and more complex than ever before. According to the U.S. Food and Drug Administration (FDA), a full 80 percent of U.S. drug ingredients and 40 percent of finished drugs come from overseas companies.4 It's not unusual for manufacturers to work with thousands or even tens of thousands of suppliers, while something as simple as a loaf of bread might have ingredients from half a dozen countries.

The result is an increasingly difficult web for companies to untangle when reports of defects start rolling in, leading to more (and more expensive) recalls.

For example, data from a recent Public Interest Research Group (PIRG) study shows that it's not just consumer perception—food recalls have actually become more common.⁵ Product recalls in general have reached staggering proportions, and a ranking of the 10 most expensive recalls ever show that more than half took place in the past decade. 6 The Takata airbag fiasco is a prime example of the havoc a single supplier can wreak, representing the largest recall in history.

Of course, not every recall can be ascribed to poor supplier quality, but there's no doubt that today's extended supply chains are driving quality risks to epic highs. This is especially



546^M **US** vehicles recalled





injuries globally



true when considering that supply chain visibility has not kept pace with the growth of global supplier networks.

For instance, a 2018 Deloitte survey of more than 500 procurement officers showed that managing risk is a top priority for more than half of companies, yet 65 percent report having poor supply chain transparency and only 6 percent are leading digital transformation initiatives that could help address the problem. ⁷

What happens when organizations combine a vast supplier landscape with poor visibility into suppliers and inefficient manual processes? Clearly, it's a ticking time bomb and, for many companies, it's not a question of if but rather when it will go off.

Supplier Management and the Quality Journey

Without question, suppliers play a key role in the evolution from reactive, manual processes to a proactive, automated quality management system (QMS). This progression takes place in four discrete stages within ETQ's maturity model.

Supplier challenges in the early stages of this journey include:

- Inefficient collaboration on supplier corrective action requests (SCARs)
- · Lack of visibility into supplier performance and risk
- · Problems with how to prioritize and scope supplier audits
- Difficult and costly coordination of in-process changes
- Poor traceability of products throughout the supply chain

The negative impacts of these challenges are wide-ranging and difficult to overstate. Outdated manual processes leave opportunities for problems to slip through the cracks unnoticed until discovered by customers. The likelihood of recalls and brand damage is higher, with poor traceability requiring withdrawal of more product than is truly necessary out of an abundance of caution.

However, recall costs are only part of the equation when looking at the full cost of poor supplier quality, which is also comprised of:

- · Time and resources required for correcting defects
- Scrap and rework
- Warranty claim costs
- Production and change order delays
- · Unplanned downtime
- Increased complaints and shrinking customer base
- Damage to profitability and brand reputation

Taken together, these costs represent a staggering yet largely hidden productivity drain that makes achieving operational excellence next to impossible.

The Innovation Impact

According to Harvard Business School researchers, recall risks are unique for companies with extensive research and development (R&D) operations like medical device and pharmaceutical manufacturers.

Not only do recalls involve huge costs for corrective action and legal expenses, they also slow innovation by as much as six months, during which time the researchers found competitors often increase their market share at the expense of the firm facing the recall. ⁸

69% of innovation leaders have real-time visibility into supplier performance metrics

As companies make progress along the quality journey, an automated QMS allows them to first eliminate manual data entry, then incorporate suppliers into their digital quality ecosystem and, finally, leverage reporting for more effective action.

In the final stage of this maturity model, quality processes are harmonized enterprise-wide, and deliver a competitive advantage from being able to anticipate and respond to issues before they reach the customer. The result is better visibility into supplier performance, better collaboration with suppliers and overall lower risk to the company.

What does this look like on a practical level?

- Updated supplier scorecards enable simplified benchmarking
- Automatic risk ranking promotes early detection of problems
- · Compliance certificates housed in a central system
- · Faster resolution of problems via centralized SCAR tracking
- More effective management and enforcement of supplier quality agreements

Automating Supplier Quality for Operational Excellence

Data from LNS Research shows that 69 percent of innovation leaders have real-time visibility into supplier performance metrics, making automation a strategic imperative for companies wanting to achieve this level of maturity. It's part of what's driving increased adoption of automated quality management system (QMS) software, a market that's growing 31 percent year-over-year according to Gartner. 10

From a logical perspective, implementing an automated QMS is critical for companies whose business models are built upon a deep network of suppliers. That's because quality problems—even when due to a supplier's mistake—will always be a reflection of the brand itself. When just one weak link in the supply chain can erase millions of dollars in brand value, automation is the only strategy that makes sense.

ETQ helps us maintain a high level of reliability in managing our corrective action database.

Ken Grisso, former Senior Quality Specialist, Herman Miller. Inc.

Finding and Fixing Supplier Problems Faster

Furniture manufacturer Herman Miller, Inc. (HMI) struggled with manual supplier processes across multiple business units and locations. Originally, its process was to type up a corrective action and mail or fax this document to the supplier. Then the company would wait until the supplier called or wrote back for clarification to work through the problem.

HMI selected ETQ Reliance because the platform's powerful flexibility meant the customer could configure workflows to its specific requirements without expensive customization.

Results:

- Corrective action resolution time shortened from 30 days to 14 days
- · Fewer defects, customer complaints and reshipments
- Increased customer satisfaction overall



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¹USA Today. Recall hits millions of pounds of food from Harris Teeter, 7-Eleven, Kroger and more. [Accessed 28 June 2019.] https://www.usatoday.com/story/money/nation-now/2018/10/22/mccain-foods-recall-2018-harris-teeter-7-eleven-tacquitos-trader-joes/1727802002/

²CNN. Boeing says some of its 737 Max planes may have defective parts. [Accessed 28 June 2019.] https://www.cnn.com/2019/06/02/business/boeing-faa-737-slat-track-assemblies/index.html

³ Consumer Reports. Takata Airbag Recall: Everything You Need to Know. [Accessed 28 June 2019.] https://www.consumerreports.org/carrecalls-defects/takata-airbag-recall-everything-you-need-to-know/

⁴ FDA. Food and Drug Administration Safety and Innovation Act (FDASIA). [Accessed 28 June 2019.] https://www.fda.gov/regulatory-information/selected-amendments-fdc-act/food-and-drug-administration-safety-and-innovation-act-fdasia

U.S. PIRG. How Safe Is Our Food? [Accessed 28 June 2019.] https://uspirg.org/feature/usp/how-safe-our-food

⁶Kiplinger. 10 Biggest Product Recalls of All Time. [Accessed 28 June 2019.] https://www.kiplinger.com/slideshow/investing/T052-S000-10-biggest-product-recalls-of-all-time/index.html

⁷ Deloitte. The Global Chief Procurement Officer Survey 2018. [Accessed 28 June 2019.] https://www2.deloitte.com/uk/en/pages/operations/articles/cpo-survey.html

Barvard Business School. Recalls, Innovation and Competitor Response: Evidence from Medical Device Firms. [Accessed 28 June 2019.] https://www.hbs.edu/faculty/Publication%20Files/19-028_a4e17428-a662-4c53-9dc9-c03d3efe06cc.pdf

LNS Research. 7 Reasons to Insist on Accurate, Real-Time Quality Data. [Accessed 28 June 2019.] https://blog.lnsresearch.com/7-reasons-to-insist-on-accurate-real-time-quality-data

¹⁰ Gartner. Market Guide for Quality Management System Software. [Accessed 28 June 2019.] https://www.gartner.com/en/documents/3886494/market-guide-for-quality-management-system-software

About ETQ

ETQ is the leading provider of quality, EHS and compliance management software, trusted by the world's strongest brands, like Kimberly-Clark, Novartis, Herman Miller and Chobani. More than 500 global companies, spanning industries including automotive, biotech, food and beverage, manufacturing and medical devices, use ETQ to secure positive brand reputations, deliver higher levels of customer loyalty and enhance profitability. ETQ Reliance offers built-in best practices and powerful flexibility to drive business excellence through quality. Only ETQ lets customers configure industry-proven quality processes to their unique needs and business vision. ETQ was founded in 1992 and has main offices located in the U.S. and Europe.

To learn more about ETQ and its product offerings, visit www.ETQ.com.

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