

etq[™] Quality Creates.[™]

Driving ROI:

The Business Case for a Proven Quality Management System



EXECUTIVE SUMMARY

How can organizations improve their quality operations to ensure the highest quality products are released to their customers? Hobson & Company, a research firm focused on Return on Investment (ROI) studies, worked with ETQ to explore how ETQ's Reliance addresses these quality management challenges.

What You'll Learn:

- The common quality management challenges manufacturers face
- Four key ways ETQ impacts customers' bottom line
- Real-world, measurable examples of how ETQ solutions help customers
- What an investment in ETQ would yield for your company based on a predictive analytics model

Background

Historically, organizations have mostly viewed quality as a requirement to maintain operational compliance; but recent research indicates that 66% of manufacturing organizations have shifted to viewing quality as an essential strategic initiative¹. Despite this elevated priority, many organizations still rely on manual methods combined with Excel spreadsheets to manage the majority of their quality processes. This approach often leads to excessively long resolution times, which further delays the implementation of critical quality improvements. To efficiently and effectively achieve the strategic benefits of superior quality, organizations must first address the challenges of managing quality that include inefficient and time-consuming processes and a lack of standardization. Increasingly, Quality Managers are aware they need effective tools that will help them standardize their quality processes and provide organization-wide visibility and traceability. With improved access to quality information, organizations can make the shift from managing quality as a cost center to managing it as a strategic business initiative.

Hobson & Company (H&C), a leading research firm focused on Return on Investment (ROI) studies, worked with ETQ, a leader in quality management solutions, to explore these challenges and learn how industry leaders are measuring the ROI from their quality management system investments. H&C conducted independent research consisting of twelve in-depth interviews with ETQ customers across a range of industries and found that a proven quality management solution addressed specific customer challenges to deliver a quick and compelling ROI.

The goal of this research study and paper is to highlight current customer examples where the impact of ETQ's QMS offering, ETQ Reliance, is not only strategic but also measurable based on key metrics confirmed by current users of the solution.

Increasingly, Quality Managers are aware they need effective tools that will help them standardize their quality processes and provide organization-wide visibility and traceability. With improved access to quality information, organizations can make the shift from managing quality as a cost center to managing it as a strategic business initiative.

Interviewed customers identified a number of recurring challenges that have been addressed by ETQ Reliance. Below is a list of recurring themes.

Lack of standardization

Customers consistently reported challenges in implementing and maintaining standardized processes across their organizations. This lack of standardization can lead to unnecessary expenses when audits reveal repeat findings.

Inefficient and time-consuming processes

When quality managers use manual processes supported by Excel spreadsheets to track and monitor quality documents such as corrective actions, nonconformance material instances, customer complaints, and supplier corrective actions, it often leads to difficulty finding the right information and excessively long resolution times. Longer resolution times create unnecessary risk for organizations because they delay implementing critical quality improvements that could ultimately reduce the risk of defects and improve product quality and customer satisfaction.

Interviewed customers identified a number of recurring challenges that have been addressed by ETQ Reliance.

Lack of traceability

Without adequate traceability, it is difficult for manufacturers to ensure transparency and accountability throughout their supply chain. Our research indicates that it is more critical today than ever before to be able to prove that products meet standards and comply with industry regulations.

Managing and maintaining compliance

Customers reported innumerable inefficiencies with manually managing both internal and external audits, as well as the cost of remediating audit findings. In addition, it is difficult to avoid unnecessary and expensive re-audits without standardized processes in place.

Reduce Risk of Non-Compliance

Save time scheduling, planning, and reporting audits

ETQ Reliance uses the Audit Management application to provide complete visibility and control over the auditing process while streamlining the scheduling, assigning, execution and reporting phases.

Customers interviewed reported the potential for:



↓20% Reduction in time spent scheduling, planning and reporting audits

“We are now able to prioritize our areas to audit based on which functions are at a higher risk than others. Prior to ETQ, it could take a couple of hours of asking around to find that document, and now I’m able to find an audit in a matter of minutes.”

Global Quality Leader, Specialty Chemical Manufacturer

Reduce time spent supporting external audits

ETQ Reliance provides the ability to track audit recommendations along with seamless integration into the Corrective Action application. In addition, Nonconformance Handling provides access to all nonconforming materials reports, and Supply Chain Quality provides access to all inspection records and plans.

Customers interviewed reported the potential for:



↓40% Reduction in time spent supporting external audits

“Because the Audit Application links directly to the Corrective Action Application, I can go directly into ETQ and quickly pull the exact information that I need to support the external audit. Prior to ETQ, I would spend a week or so pulling together that information for each audit.”

Global Quality Leader Specialty Chemical Manufacturer

Reduce number of audit findings

ETQ Reliance helps reduce the risk of audit failure by keeping your organization in an audit-ready state at all times. In addition, Nonconformance Handling reduces the risk of audit failure with an automated system for storing and tracking all nonconforming materials data. Supply Chain Quality reduces the risk of audit failure with an automated system for storing and tracking all inspection records and data.

Customers interviewed reported the potential for:



↓37% Reduction in number of audit findings

“We have reduced the number of ISO audit findings by 50% with the more effective processes that are supported by ETQ.”

EQM Systems Leader Industrial Equipment Manufacturer

Streamline Operations

Reduce time spent on document revisions, review, and approval

The ETQ Reliance Document Control application allows customers to manage the creation, distribution and archiving of all controlled documents in a centralized and structured framework. Workflow routes documents for comment and approval as they are created and updated. In addition, Training Management when linked to Document Control tracks the training of all appropriate employees on critical documents. Lastly, the Change Management application provides a change summary that describes the change to be implemented, identifies the affected documents and creates necessary action plans.

Customers interviewed reported the potential for:



↓ 10% Reduction

in time spend on document revisions, review, and approval

Reduce time setting up and managing a nonconforming materials instance

Nonconformance Handling manages the review and disposition of any production materials that do not conform to standard specifications.

Customers interviewed reported the potential for:



↓ 20% Reduction

in time spent setting up and managing nonconforming materials instance

Reduce time spent managing customer complaints

Nonconformance Handling manages invaluable customer feedback that can be integrated into the nonconformance handling process to enable a closed-loop of continuous improvement.

Customers interviewed reported the potential for:



↓ 30% Reduction

in time spent managing customer complaints

“We recently implemented the Document Control Application in one of our divisions that had an audit finding, and they are saving hours and hours each week by not having to spend time searching for documents.”

Enterprise Manufacturing System Lead, Global Materials Manufacturer

“The majority of the impact we have seen is with the Planned Deviation Application. We have shortened the average cycle time for a Product Deviation from 315 days down to 87 days.”

EQM Systems Leader, Industrial Equipment Manufacturer

“ETQ helps us analyze trend data and better understand the root causes of problems that triggered customer complaints. We can show this information to product line managers and allow them to take action on it, which has definitely helped improve quality.”

Enterprise Manufacturing System Lead, Global Materials Manufacturer

Reduce time receiving and inspecting incoming supplier deliveries

Supply Chain Quality uses the Receiving and Inspection application to integrate the process of receiving materials from suppliers and setting up inspection schedules based on supplier performance tendencies.

Customers interviewed reported the potential for:



↓ **15% Reduction** in time spent receiving and inspecting incoming supplier deliveries

“Supplier deliveries have been drastically improved with the implementation of ETQ and our Onsite Supplier Assessments because we know in advance if a supplier can make the parts per our specifications.”

EOM Systems Leader, Industrial Equipment Manufacturer

Reduce time spent managing a supplier corrective action

Supply Chain Quality uses the Supplier Corrective Action Request application, which automates the process of creating, managing and resolving supplier corrective actions. In addition, organizations can include suppliers in the workflow for resolving specific issues.

Customers interviewed reported the potential for:



↓ **20% Reduction** in time spent managing a supplier corrective action

“We send supplier corrective actions daily, and ETQ has helped reduce the cycle time by 50%. Prior to ETQ, it could take up to 180 days to resolve a corrective action (if they ever got closed at all), and with ETQ, the average resolution time is 90 days.”

Quality Systems Leader, HVAC Equipment Manufacturer

Reduce Costs

Reduce scrap and rework costs with more efficient operations

ETQ Reliance allows organizations to build quality into the entire manufacturing process. In addition, Nonconformance Handling fosters continuous improvement and boosts product quality by tracking issues and resolutions. Supply Chain Quality also provides automated control and visibility over all elements of the supply chain from local manufacturers to global suppliers, from specification to receiving and inspection to corrective actions and supplier ratings.

Customers interviewed reported the potential for:



↓ **3% Reduction** in scrapping and reworking costs

“With ETQ, we have been able to reduce the amount of scrap & rework by 32%.”

EOM Systems Leader, Industrial Equipment Manufacturer

Reduce field failure costs with fewer product defects

Nonconformance Handling improves visibility into nonconforming material causes and preventative measures.

Customers interviewed reported the potential for:



↓ 5% Reduction

in field failure costs

“We have been able to reduce our overall warranty costs by 70% (which was tens of millions of dollars). This includes a combination of standard warranty costs as well as Initial Customer Quality (ICQ) claims”

EOM Systems Leader, Industrial Equipment Manufacturer

Reduce IT spend through QA system consolidation

ETQ Reliance provides a fully integrated solution for document control, corrective action and change management, allowing organizations to consolidate all of these functions into one centralized system of record, which ultimately reduces overall IT spend. The breadth and flexibility of the solution enables consolidation across numerous systems. In addition, Nonconformance Handling and Supply Chain Quality both provide a fully integrated solution for their respective areas to further reduce IT spend.

Customers interviewed reported the potential for:



↓ 18% Reduction

in IT spend

“Since implementing ETQ, we have been able to get rid of over half of the existing software solutions, and we expect to remove even more in the future (with a goal of removing all of them and standardizing on ETQ). In addition to the software savings, there are IT resources that are no longer needed to support such a disparate collection of software packages.”

EOM Systems Leader, Industrial Equipment Manufacturer

Reduce inventory carrying costs

Nonconformance Handling allows users to enter nonconforming material reports into the QMS much faster while providing real-time visibility into inventory, allowing them to be more accurate and, therefore, leaner. In addition, Supply Chain Quality’s review and approval workflows provide full visibility and control of the qualification process, with the option of publishing the results directly to suppliers for feedback and corrective action.

Customers interviewed reported the potential for:



↓ 0.5% Reduction

in inventory carrying costs

“Inventory accuracy is a big issue and has a snowball effect. We noticed that our ERP system alone was not able to manage inventory accurately. With ETQ integrated with our ERP, I was able to ensure that we would never do a transaction that would force the inventory to go negative (which Oracle would allow).”

EOM Systems Leader, Industrial Equipment Manufacturer

Grow/Protect Revenue

Increase customer satisfaction/brand loyalty with higher quality products

ETQ Reliance is a fully automated and tightly integrated Quality Management System that helps increase customer satisfaction by expertly managing the critical processes (CAPA, SCAR, NCM, etc.) that define and secure your brand's reputation. With the addition of Nonconformance Handling, users can incorporate invaluable customer feedback into the nonconformance handling process to enable a closed-loop of continuous improvement. Also, Supply Chain Quality provides external users with secure logins to deliver controlled access to ETQ Reliance by suppliers and other critical third parties. This helps extend a culture of quality to the entire production ecosystem while maintaining security.

Customers interviewed reported the potential for:



↑ 0.75% Increase

in revenue due to increased customer satisfaction

“Since we started using ETQ, our Net Promoter Score (NPS) has improved globally from 22 to 28, and while there are several factors that have contributed to that, ETQ is responsible for at least half of that improvement.”

Global Quality Leader, Specialty Chemical Manufacturer

Reduce new product development timeline

ETQ Reliance reduces the new product development timeline by fully integrating quality throughout the entire process, ultimately reducing the time to market. In addition, Nonconformance Handling's Inspection and Testing application tracks and evaluates the quality of in-progress goods in real-time, reducing defects in finished products. Supply Chain Quality's Production Part Approval Process (PPAP) allows companies to evaluate the components and sub-systems they receive from suppliers, establish clear design specifications for suppliers and monitor supplier compliance with those standards.

Customers interviewed reported the potential for:



↓ 30% Reduction

in new product development timeline

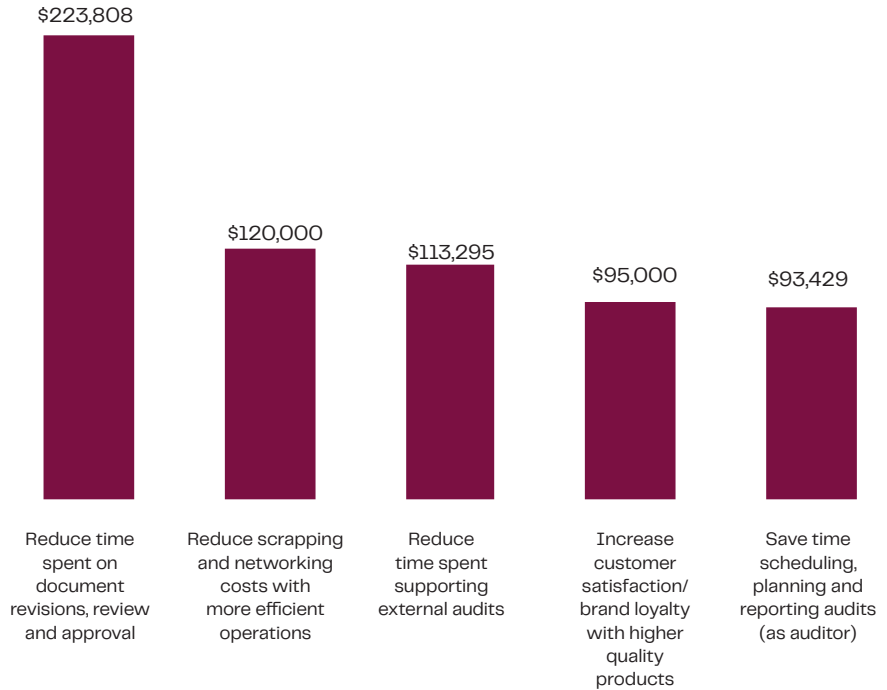
“ETQ's Specification Management Application has taken a totally manual process and automated it, helping us take weeks off of this timeline.”

Enterprise Manufacturing System Lead, Global Materials Manufacturer

Key ROI Findings

Fourteen discrete organization-wide benefits were identified during the customer interviews for this research paper. Below is a sample of the top five benefits and their potential annual value to an organization with \$760 million in annual revenue and \$24m in annual scrap and rework costs:

Top five benefits and their potential value to an organization



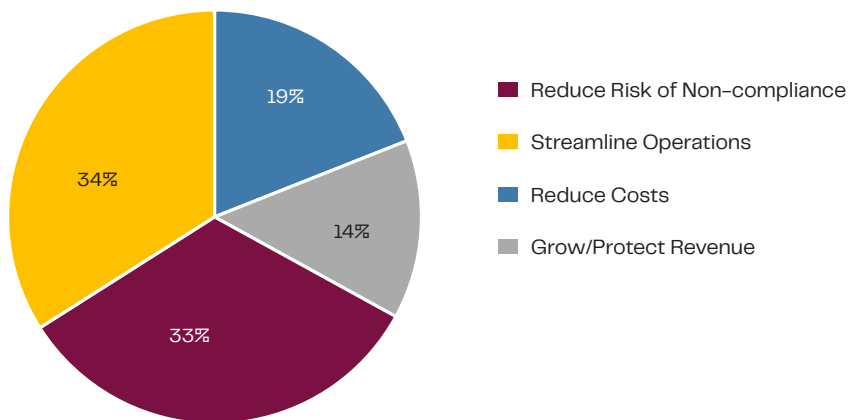
Financial Metric	3-Year Value
Payback	3 Months
ROI	330%

The value of ETQ's Quality Management solution is immediate and demonstrable following implementation. This organization realizes significant financial benefits from an investment in a proven quality management solution. For this typical organization, annual benefits can exceed \$665k per year.

For this example, the three-year return on investment is strong at 330% percent. The key financial metrics were calculated using standard financial modeling methods.

ETQ works with customers to help them identify potential areas of savings and estimate the ROI for their organization to inform both the business case as well as on-going success of QMS usage.

Benefits by Value Driver



References:

1. ETQ. (2020). The Rise of Quality as a Strategic Initiative.

<https://blog.etq.com/rise-of-quality-report>

About ETQ

ETQ is the leading provider of quality, EHS and compliance management software, trusted by the world's strongest brands, like Kimberly-Clark, Jazz Pharmaceuticals, 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.