



**Using an Integrated HSEQ  
Management System  
to Reduce Risk, Ensure  
Compliance and Improve  
Business Performance**

## Executive Summary

Companies have traditionally managed quality and Environmental, Health and Safety (EHS) programs using a decentralized set of manual systems and point solutions. Each department has its own methods, keeping data in separate information “silos” that block visibility, increase risk and drive up costs.

It’s why nearly half of Chief Information Officers (CIOs) think their businesses have too many applications, and why roughly 3 in 4 believe those applications should be consolidated.

Today, many organizations are moving to integrate Health, Safety, Environmental and Quality (HSEQ) management as a key strategy for creating a culture of collaboration and interconnectedness. Factors driving the transition towards an Integrated HSEQ Management System include the need for companies to:

- Ensure safety, security and reliability of operations.
- Prevent unplanned incidents and events.
- Produce safe and effective products.
- Increase organizational effectiveness.
- Engage internal and external stakeholders.
- Preserve and transfer institutional knowledge.
- Sustain the organization’s license to operate.

An Integrated Management System helps companies achieve these objectives by providing high-level visibility and control over all quality, EHS and sustainability processes. Linking these processes improves standardization, transparency and efficiency, all of which are critical goals of operational excellence.

This white paper will cover problems with decentralized quality, EHS and sustainability management approaches. It also looks at the benefits an automated system can help organizations achieve, as well as what defines an Integrated HSEQ Management System.

## Problems with Traditional Quality and EHS Management Approaches

As many as 1 in 4 companies still use outdated manual

tracking methods like spreadsheets to manage data related to environmental reporting, hazard assessment and/or audits. Even among those using quality or EHS software, many use point solutions or internally developed systems for processes such as Corrective Action and Incident Management.

These point solutions and manual systems have limited capability to exchange data. Each system exists on its own island, obstructing visibility and making it difficult to share data and information. As a result, nearly half of companies identify these disparate systems and data sources as a top challenge to improving EHS performance.



Implications of this decentralized approach include:

- **Increased costs:** Maintaining piecemeal systems for overlapping quality and EHS functions drives up overhead costs. It’s not uncommon for companies to spend \$100,000 or more on a point solution aimed at managing a single process. Thus, it’s no surprise that reducing the IT footprint is a primary driver of the trend towards integrated management systems.
- **Wasted time:** Research shows the average employee spends what amounts to a full day every week just looking for information. Lack of automation also slows down approval requests, increasing review cycle time by as much as double.
- **Compliance issues:** The lack of a paper trail makes it difficult to identify, track and resolve gaps in compliance. Companies have been slapped with fines in excess of \$20 million dollars for poor recordkeeping.

- **Collaboration problems:** Using email chains or shared server drives to exchange information is time-consuming and prone to error, especially versioning issues. 46% of companies cite poor collaboration across departments as a major challenge to EHS performance improvement.<sup>3</sup>
- **Inconsistent data:** Spreadsheet analysis and varied units of measure across global locations increase data processing time, creating opportunity for mistakes that can be difficult and time-consuming to detect. Research shows that a full 88% of spreadsheets have errors.
- **Resources needed for compliance reporting:** Capturing, aggregating and/or repurposing data for management and compliance reports use up excessive time and resources. The lag time in reporting means that data is no longer actionable by the time it's been processed.

These problems drive up costs and create visibility gaps, increasing risk and hurting business performance. As a result, many companies are adopting integrated management systems that integrate people, process, and technology on a single platform for quality, EHS and sustainability.

Integration addresses many of the problems of decentralized systems, helping to reduce risk, costs and compliance issues while providing a flexible framework for operational excellence.

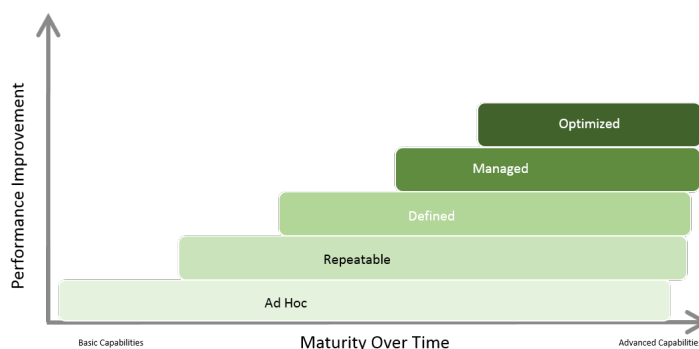
## Improving Performance Through Integration

Industry has undergone a transformation in quality and EHS management over the past several decades. In the 1970s and 1980s, companies focused exclusively on regulatory compliance in response to environmental and occupational health laws.

Quality philosophies aimed at organizational improvement influenced EHS trends of the 1990s, moving beyond just avoiding incidents towards a positive vision of sustainable development. Today, the goal is operational excellence, using standardization and closed-loop systems to guide continuous improvement of key performance indicators (KPIs).

This evolution is mirrored on a smaller scale within companies themselves. As companies mature in how they approach Integrated HSEQ Management System they typically move through a predictable progression of phases:

- 1. Ad-Hoc:** This stage is marked by a lack formalized processes or systems. Individuals drive piecemeal quality and EHS efforts, largely in reaction to problems and with little to no organizational support.
- 2. Repeatable:** In this phase, the company has moved towards establishing some formalized systems. Processes are disparate and decentralized across scattered information silos, and regulatory compliance is still the main goal.
- 3. Defined:** The move towards defined roles and processes—as well as implementing enterprise systems that begin to integrate information silos—represents a step change in performance improvement.
- 4. Managed:** Here, integration of enterprise-wide roles, processes and systems allow companies to identify and monitor key performance indicators (KPIs). This delivers increased visibility that accelerates improvement gains.
- 5. Optimized:** In the final stage, integration of closed-loop systems, advanced analytics and social collaboration enables companies to prevent problems instead of simply responding to them. The focus has shifted away from events towards improving operational performance. This phase represents the final step in the transformation from reactive to proactive HSEQ management.



Ultimately, this transformative shift is what lays the groundwork for operational excellence. Case studies have proven a positive return on investment (ROI) for integrated systems of as much as 77%, totaling millions of dollars for one large company. Integrated systems deliver these results by enabling companies to achieve several objectives:

### Accountability

Accountability is a central component of many different

operational excellence methodologies. Additionally, many companies now tie compensation to performance, but this can be difficult without the right tools in place. Automated KPI tracking across quality and EHS supports greater accountability, allowing organizations to link specific actions to concrete results.

### Centralization

A centralized HSEQ platform eliminates the inefficiencies of manual systems and siloed point solutions, in some cases replacing up to 700 manual systems. This helps companies:

- Reduce time wasted jumping manually between systems.
- Avoid versioning issues that increase the risk of mistakes.
- Eliminate redundancies that result in duplicate effort.

### Collaboration

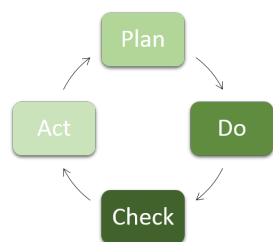
A unified system promotes better collaboration with internal and external stakeholders, a key part of operational excellence. Automated software provides real-time data to streamline management reviews and communications with regulatory agencies, customers and suppliers. An integrated system also provides a single source of truth for making data-driven decisions.

### Standardization

Efficiency and consistent execution of processes are both hallmarks of operational excellence. At their core, processes such as Corrective Action, Audits and Adverse Event management are similar across quality and EHS. Integrated HSEQ Software makes it possible for companies to standardize these processes, while also leaving flexibility to support differences in workflows and departmental needs.

### Transparency

Automated data collection across different facilities, divisions and business units increases visibility across the organization. Data can no longer become buried, whether through inefficiency or because individual site leaders are hesitant to reveal problems.



### Compliance

Compliance with regulations, standards and internal policies is a basic requirement of operational

excellence. Centralized HSEQ Systems allow you to apply closed-loop processes that reduce compliance issues, also helping to more effectively resolve problems through automated routing and escalation of overdue items.

## Best Practices for Integrating HSEQ Performance Management

In this section, we'll explore some of the practical considerations around integrated HSEQ Management. Engaging your workforce and providing executive visibility into enterprise-wide performance are top priorities, focusing on the following key objectives :

- **Assess and treat risks:** All risk items should be tracked in a centralized Risk Register and linked to controls.
- **Monitor and manage quality:** Direct integration with ERP and manufacturing systems is essential for traceability and managing quality issues in real time.
- **Identify and comply with obligations, commitments and constraints:** Best practices include linking individual requirements with controls, identifying gaps and assessing risk to prioritize new controls.
- **Report and investigate incidents:** Companies should design automated workflows for different incident types, including escalation rules for when items are overdue.
- **Conduct audits and address findings:** By linking audit findings with the Corrective Action system, you can better track compliance history and ensure prompt resolution of issues.
- **Deliver and track employee training:** Leading companies integrate Employee Training tracking tools with human resources (HR) databases and competency profiles. Advanced capabilities include linking equipment access to training and certification compliance.
- **Support ISO and Responsible Care® programs:** Rather than viewing ISO programs as a separate process, they should be integrated into daily operations and management systems.
- **Measure and report on sustainability goals and objectives:** Instead of just aggregating sustainability data

annually, companies should include the data in management reviews of quality and EHS performance.

From a technology perspective, executing these strategies is simpler with an integrated HSEQ Management System. A centralized platform enables standardization of core, overlapping processes, while providing additional capabilities specialized to quality, EHS and sustainability.

## Harmonizing ISO Programs

Companies are embracing integrated management as a flexible framework for complying with multiple standards and sustainability reporting frameworks such as the Global Reporting Initiative (GRI) and Carbon Disclosure Project (CDP).

ISO recently adopted a new high-level structure as a common framework for all new standards and updates. Called Annex SL, this structure includes similar requirements for many core management system elements such as:

- Document control
- Audits and Inspections
- Risk management
- Incident and nonconformance management
- Employee training
- Change management
- Supplier and subcontractor management

The new high-level structure allows companies to build from one certification to another, or even create ISO-based programs without pursuing full certification. Some of the most widely used standards companies are harmonizing in this way include:

- ISO 9001:2015 for Quality Management
- ISO 14001:2015 for Environmental Management



- ISO 45001:2017 for Health and Safety Management (replacing OHSAS 18001)
- ISO 31000:2009 for Risk Management
- ISO 19600:2014 for Compliance Management

## Closing Thoughts

Decentralized quality, EHS and sustainability management contributes to increased risk and compliance problems, negatively impacting business performance. These problems have led many companies to standardize HSEQ processes using an integrated, automated system. Ultimately, this type of system provides a flexible foundation for continuous improvement.

If we can learn anything from market leaders, it's that mature HSEQ approaches are a prerequisite for achieving operational excellence. Integrated platforms help companies get there faster by streamlining the path towards:

- A safety and healthy workplace that helps attract and retain talent.
- Optimized use of assets.
- Smaller environmental and IT footprint.

- Lower costs and higher margins.
- Enhanced reputation and stakeholder confidence.

## About EtQ

EtQ is the leading Quality, EHS, Operational Risk and Compliance management software provider for identifying, mitigating and preventing high-risk events through integration, automation and collaboration. At the core of EtQ's framework is a compliance management platform that enables organizations to implement best in class compliance processes configured to meet their existing processes, create new compliance processes and automate and control their compliance ecosystem. EtQ's product lineup includes Traqpath™ for individual compliance users, Verse Solutions™ for small to medium sized businesses and Reliance™ for enterprise organizations. EtQ was founded in 1992 and has main offices located in the U.S. and Europe. To learn more about EtQ and its various product offerings, visit [www.etq.com](http://www.etq.com) or [blog.etq.com](http://blog.etq.com).

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