



WHITE PAPER

Leveraging Technology To Achieve ISO 45001 Goals

Ensure Compliance with
Regulatory Standards

Identify Potential Gaps in
Training

Streamline Audits and
Incident Investigations

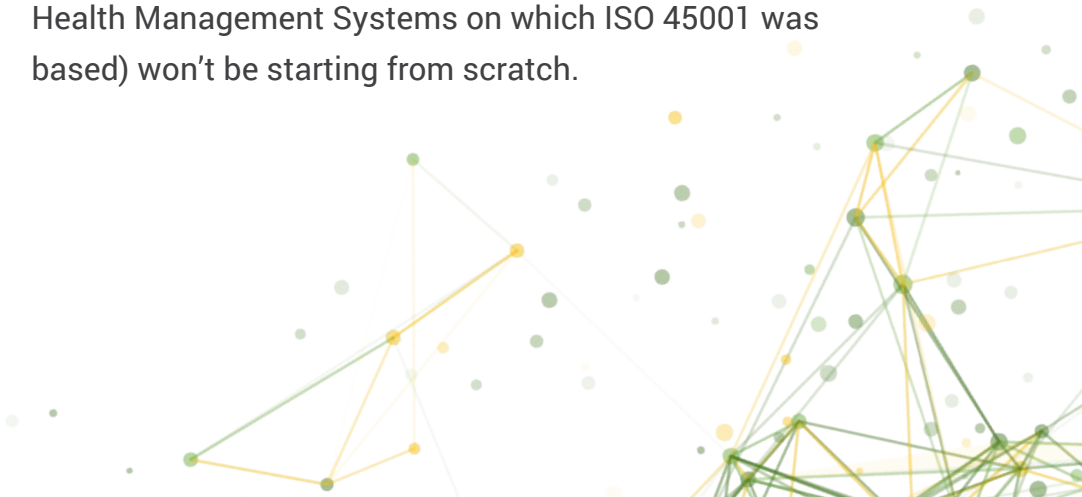
Proactive Identification of
Hazards and Risks

Introduce a culture of
responsibility to your
workforce

Enhance Collaboration

Track Safety Program
Improvement

The purpose of ISO 45001, the Occupational Health and Safety Management System Standard published in March 2018 by the International Standards Organization (ISO), is to give employers of all sizes, in all nations, a tool that will enable them to proactively identify and manage OHS risks. The new standard is built on the same high-level structure as ISO 9001, Quality Management Systems, and ISO 14001, Environmental Management Systems, so any employer who has already implemented one or both of those, or OHSAS 18001 (the British standard for Occupational Safety and Health Management Systems on which ISO 45001 was based) won't be starting from scratch.



Still, the requirements of the standard – from recordkeeping and documentation to communication and analysis – can be daunting. Many organizations have noted that, by the time they have completed all of the documentation requirements for an ISO management system, it has become too cumbersome to have any practical use. When that happens, the various ISO management standards become just another certification required by customers or clients, rather than a truly effective tool for enhancing performance. But just as an industrial robot can increase productivity by taking over simple, repetitive tasks, there is technology available that can function alongside your OHS personnel to help them manage the documentation that is essential to implementing an effective, proactive management system. Technology can also help your organization discover risk patterns and identify potential hazards, to aid in the mitigation of workplace OHS problems.

Let's look at some areas where technology can improve upon your information management and analysis system so your organization will benefit in tangible, practical ways from a new system that, on the surface, looks top-heavy with documentation.

Ensure Compliance with Regulatory Standards

The various ISO management systems, including ISO 45001, require extensive documentation – but part of that is a function of what they're trying to keep track of. If there's any area that is as document-intensive as an ISO management system, it's regulatory compliance. In the U.S., many OSHA standards require written programs, trainings, inspections, periodic reviews, reports, permits, monitoring results, and other elements that require high-level coordination and extensive documentation.



Getty Images

As far as ISO 45001 is concerned, regulatory compliance is one of the external issues or third-party expectations that make up the “context of the organization” – all of the various factors that make up the environment in which the organization operates. Identifying and accounting for these issues is a crucial piece of your ISO 45001 management system.

It can be overwhelming. In the U.S. alone, organizations must keep up not only with OSHA regulations, but also with a range of other safety regulations that may apply. This can include:

- State and local rules, for example, fire safety, tobacco, or noise ordinances that may affect your business
- OHS rules administered by other agencies that have jurisdiction over your organization, such as the Federal Aviation Administration (FAA), Mine Safety and Health Administration (MSHA), or Department of Homeland Security (DHS)
- OHS rules administered by agencies whose jurisdiction overlaps with or operates adjacent to OSHA, such as the Department of Transportation (DOT) or the Pipeline and Hazardous Materials Safety Administration (PHMSA)

Identifying and accounting for [external] issues is a crucial piece of your ISO 45001 management system.

Organizations that operate multinationally may wish to track an even broader array of agency regulations and rules.



A technological solution – an electronic tracking service – may be the only way to truly keep abreast of most or all of the latest regulatory developments, as well as any changes to the ISO 45001 standard itself. A highly sophisticated electronic tracking service can also enhance your regulatory compliance by customizing the reports you receive. If your organization does not need safety showers and eyewashes, there's no reason to receive an alert when those rules change.

It's also true that just tracking the rules isn't all you need: **what you need is a way to determine how those rules will impact your organization.** A robust software solution can help you there as well. For example:

- Do you need to track change management processes? Software can be used for implementing and managing the Management of Change (MOC) processes in both regulated and non-regulated environments.
- Do you need to retrain workers? New rules may mean updated training is required.
- Do you need to change your audit or inspection processes to account for any rules changes?

Identify Potential Gaps in Training

Keeping track of the training that each individual in your facility needs can be a herculean task. Not only do you need a record of who had which training, and when, you may also need a record of who performed the training, what their credentials were, and what was covered in the training. Many organizations use software solutions to track and schedule training. Under ISO 45001, organizations may find it helpful to look for an integrated software solution that includes training in an overall management system package.

A software program that integrates all of your ISO 45001 compliance requirements, including training, can:

- Identify training that your workers should have as part of your own workplace safety program, as well as your regulatory compliance efforts
- Notify you when workers are due for refresher trainings
- Track who has been trained and what their training covered
- Connect your training requirements with management of change, flagging changes that may impact your training needs

Streamline Audits and Incident Investigations



Getty Images

Audits are an essential element of your ISO 45001 program. They are extensive and require auditors who understand not just the organization and its goals, but also ISO 45001. The audits themselves may need extensive customization; they can also be extremely time-consuming to complete. Depending on the size of the organization and the number of people involved in the audit process, they can quickly become difficult to manage.

The right technology can streamline and organize the process by:

- Creating a single, cloud-based system for scheduling, scoping, and assigning audits
- Beginning from pre-built audit checklists that cover the full range of components that might apply, that can then be tailored as needed for specific areas or tasks
- Automatically generating summary audit reports and providing them to the correct individuals

- Automatically generating corrective actions for checklist items that are found to be deficient (or “nonconforming”), in accordance with both the hierarchy of controls and applicable management of change procedures
- Automatically assigning corrective measures to the appropriate personnel
- Enabling employees to perform inspections using their mobile devices, with the results automatically submitted to and available on a systems dashboard for review

When you need to perform an incident investigation, response time can be critical: the faster you begin your investigation, the fresher everyone’s memory is, and the less likely it is that someone will have disturbed or altered something at the scene of the incident (for example, to begin repairs or cleanup operations). Technology can help you begin an investigation more quickly, by providing immediate access to cloud- or web-based tools that will walk on-site personnel through the investigation and root cause analysis process. A well-designed tool can then generate and assign appropriate corrective actions for follow-up. In addition, if your program is integrated across all of your sites, it can flag any similar incidents, equipment, or operations in your organization that pose similar risks and may need to be addressed.

Proactive Identification of Hazards and Risks

One of the stated goals of the ISO 45001 standard is to create a work environment that responds proactively, rather than reactively, to workplace hazards that threaten workers lives, and acts in



Getty Images

advance to control risks. In part, the standard's emphasis on effectively managing audits, training, corrective actions, employee engagement, and communication will create such an environment.

Another established way to create a proactive risk- and hazard-management environment is to gather data – on minor incidents, like cuts and bruises and other first-aid incidents, as well as on near misses and observations – and look for patterns. When it comes to crunching numbers and looking for patterns, computers and software are much more effective, and capable of handling much larger amounts of information, than human beings are. Software can help you gather, sort, and analyze all of the relevant information to identify patterns of risk, so that corrective actions can be taken before a serious incident occurs.

Introduce a culture of responsibility to your workforce

How do your workers feel about safety? Do they believe, since nothing has happened to them yet, that nothing will happen to them? Do they believe that health and safety is management's responsibility? What about your executives? Are they less than fully engaged in your OHS efforts? The right technology can help turn an unsafe culture around.

It may be that your workers don't perceive that the organization is committed to their health and safety, or it may be that they don't know what they can do, or where to begin. It may be that your executives have no clear idea where the organization stands – or how it stands to benefit. Software tools can put audit checklists, risk analyses, and corrective actions right in the hands of your

production workers, through their mobile devices; the same tools can put compliance reports, risk analyses and progress reports right in the hands of your executives, so that they can see what's working, and the impact that it's having. An integrated ISO 450001 management system and a management software system working in concert may be just what you need to promote a culture of responsibility and accountability in your workforce.

Enhance Collaboration

Without the sustained commitment of management and workers, the organization will not see the full benefit of its ISO 45001 efforts. Management must be fully committed to improving safety performance, through a policy-level commitment to providing safe and healthy working conditions by eliminating hazards and reducing risks.

This is not an end that an organization's management can achieve on its own. A successful program is built on the collaboration of management and employees. In order to foster such collaboration, ISO 45001 requires an organization's management to:

- Assign responsibilities, accountabilities, and roles within the OHS management system, and make sure that all of these are communicated at all levels within the organization
- Consult with and enable the participation of workers and their representatives
- Determine what must be communicated and how communication will take place



Getty Images

- Identify and remove any barriers to participation, such as multiple languages in the workplace, that can prevent collaboration

In order to enable and streamline communication with workers, employers can readily leverage electronic communication and accessibility tools. Workers can receive information through direct messages, and that information can be made readily accessible, in multiple languages when necessary. Workers and management in distant locations – and translators, as well, if needed – can attend face-to-face meetings through the use of online and electronic meeting tools.

Organizations must provide a mechanism for workers to share information and enable them to report issues freely.

Communication should work in two directions. Organizations must provide a mechanism for workers to share information and enable them to report issues freely. Online or cloud-based tools can connect workers both to management and to one another. They can provide customizable privacy settings for workers who want to report concerns, so that workers can file anonymous reports if they choose. Such systems can also ensure that reported concerns and questions are appropriately prioritized and dealt with – no more scraps of paper getting buried at the bottom of the suggestion box.

Track Safety Program Improvement

In order to know if your efforts are bearing fruit, you'll need a way to assess outcomes – specifically, to determine whether your safety program is improving. Any technology you choose to facilitate



your auditing and recordkeeping should also have the functionality to compare leading and lagging indicators of progress in your program, such as:

- The percentage of employees who are fully trained
- The number of corrective actions generated during audits
- The number and severity of incidents and near misses
- Levels of participation in safety committees and other safety initiatives
- Recordable injuries

Over time, as your ISO 45001 management system reaches full implementation, you should see levels of trained workers and participation rates increase, while corrective actions, incidents and injuries decrease. If that isn't happening, you'll know that you need to revisit your program.

Conclusion

In order to create a successful ISO 45001 management system, you need a firm commitment from management and the engagement of your workforce – but even that may not be enough. The right technology can take a program that would require a small army to manage, and enable a small staff to implement all aspects of the management system effectively.

ABOUT DAKOTA SOFTWARE



Dakota Software's Compliance-based EHS Management solutions empower companies to more effectively plan and execute EHS procedures and make measurable improvements to their overall operational performance.

Dakota Software is the only provider of EHS compliance solutions that deliver a comprehensive regulatory library through an enterprise-wide EHS compliance process management system. This exclusive feature, combined with Dakota Software's proprietary taxonomy engine, allows users to easily determine which requirements apply to which sites and build the appropriate compliance program for each site. Furthermore, users are automatically notified of upcoming new regulations and pending regulatory changes.

Dakota Software's products are available through a Software as a Service (SaaS) subscription. That means users access their data and records through a standard web browser. No special equipment or set up is required. Don't waste resources on infrastructure, upgrades and ongoing maintenance. With SaaS, Dakota is able to deliver more features, enhanced control, better security, and superior integration. And our solutions are 100% scalable, so you can start with a single user and add new users as needed. Self-hosting is available for clients with special circumstances.

ADDITIONAL RESOURCES

White Papers

Dakota Software's white papers provide in-depth insight on today's most pressing EHS and Sustainability issues.

Analyst Reports

As an industry leader, Dakota Software has sponsored numerous research reports on EHS and Sustainability best practices and trends.

Application Briefs

View other software applications offered within the ProActivity Suite. Let us help you drive compliance with integrated regulatory content and allow enterprise-wide collaboration from any device, online or offline.

EHS Software Value Calculator

Better information management is critical to improving your organization's EHS performance. End the inefficiencies caused by paper processes, spreadsheets, and ad hoc software by creating your business case.

1375 Euclid Ave.
Suite 500
Cleveland, OH 44115
216-765-7100
www.dakotasoft.com