

We live in a "compliance culture."

The rule of thumb is to either comply with the myriad laws, rules, and permit conditions, or face the consequencesnegative public image, hefty fines, or even jail time. The introduction of the Title V federal air permit rules and the Sarbanes-Oxley Act launched U.S. business into a new era of compliance. Today, companies must have capable systems to monitor processes and emissions on a continuous and simultaneous basis, so that they can, with confidence, assert that they comply with all requirements.

Companies must have precise knowledge of their dayto-day operations and environment, health, and safety (EH&S) impacts. To do this, compliance must be addressed

across a wide range of business management systems, including daily transaction processing, content and records management, performance metrics, and reporting. Information technology (IT) is becoming a normal, reasonable business practice for compliance management. In fact, stakeholders now expect companies of a certain size to use information systems and technology.

THE TECHNOLOGY ADOPTION **PROCESS**

IT solutions can greatly enhance an organization's ability to meet EH&S compliance requirements, while simultaneously reducing business risk. However, organizations adopt IT solutions at different rates. Your organization's culture and where it falls on the technology adoption curve dictates your ability to accept and absorb new technology (see Figure 1).

Market Innovators are out in front, investing resources, sometimes just for the sake of technology. They can be instrumental in developing new IT systems. They work with software vendors, implementers, and systems integrators to establish features and functionality. At this stage, systems are new, not fully developed, and relatively costly. Early Adopters ride the coattails of innovators. At this stage, systems are more mature, but still lack rigorous testing in the marketplace. These visionaries see the competitive advantage in early adoption of IT systems. Most organizations try to position themselves in the *Market Majority*. Those in the middle of the pack wait for software to become mainstream, more widely used in the market, and relatively affordable. Laggards are skeptical of technology. They want all the software "bugs" to be worked out and want to purchase systems at commodity prices.

LEADING THE PACK

Even if you don't consider your organization particularly "high tech," several situations may compel you to become an innovator or early adopter of new technology. These

- "Green" corporate policy or public image initiatives.
- Market-driven need for certification, such as ISO 9001/14001 or Responsible Care.
- Complex facilities or organizations that will place a large demand for technology relative to the market supply.
- Compliance systems that require significant integration/interfaces with other systems.
- Facilities with a window of opportunity to deploy new IT systems (e.g., maintenance turnarounds or other IT initiatives).
- Software vendors, implementers, and systems integrators might offer better terms when they have idle staff.

There can be downsides to early adoption of technology, of course. It is typically riskier and costs more than

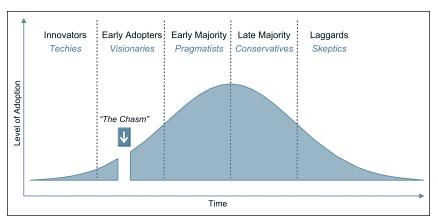


Figure 1. Technology adoption curve (adapted from Geoffrey Moore, Crossing



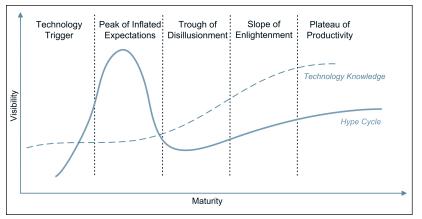


Figure 2. Hype cycle (adapted from Gartner Research).

market-tested solutions. For example, you might be using technology that is two cycles ahead of the pack, thereby requiring multiple updates and upgrades.

SITTING BACK

You may opt to be in the market majority and benefit from software features and functionality demanded by others, plus lower software costs. Know the tradeoffs—if you are in the middle of the pack, you may find that implementation and integration resources are in high demand, increasing the cost of deploying the system on your schedule. If you choose to wait it out and become a laggard, you may get proven technology, but not at much of a cost savings. You run the risk of missing compliance deadlines and bringing adverse attention to your organization. With or without EH&S software solutions, you need to address compliance issues on a timely basis, and should not rely on a passive enforcement environment.

ADDRESS YOUR CONCERNS

There are several common concerns that prevent companies from starting IT initiatives for EH&S compliance. Below is advice on how to address these concerns.

Market Hype. EH&S compliance software has changed dramatically within the past 2-3 years. It is now better than ever before. However, as with any new technology, market hype can exceed software capabilities (see Figure 2). Be sure to get references from the software vendor and fully understand the software's true capabilities.

Lack of Information. Potential software users typically don't know enough about how IT solutions can help the compliance process and improve an organization's productivity.

Jill Barson Gilbert, QEP, is president of Lexicon Systems, LLC. She helps organizations increase business value by designing and implementing EH&S management solutions that leverage technology. E-mail: JBGilbert@Lexicon-Systems.com.



Software can help manage the administrative aspects of regulatory compliance by speeding up the process, adding consistency, and reducing the potential for errors. Still, many organizations do not realize that the end solution may include a variety of technologies, such as collaboration tools, document management, automated workflows, task management, and metrics. Form an interdisciplinary team to learn about available systems and technologies. Find someone who can educate the team about a variety of systems and solutions.

Complexity. Some companies mistakenly think that IT solutions will hinder-not help—their operations, adding unwelcome

complexity to compliance systems. Solutions may focus on day-to-day data collection, management systems, or a combination of these. It is important to get advice on which components of a given system will provide your company the most benefits. Talk with existing users to see how they use the system.

Staffing. Will deploying new IT systems require additional staff, have no impact, or eliminate jobs? Resource needs vary, depending upon your organization's core IT and EH&S competencies. Resource needs also vary with time-from compliance system design through deployment and after system rollout. Be realistic, and don't expect staffing needs to be static with a new system. Seek assistance if you don't know how to accurately estimate your resource needs.

Business Case. Companies demand a solid business case for the implementation of sizeable IT efforts. This requires collaboration among senior management, EH&S, IT, and financial staff. Look for cost-avoidance, projected cost savings, and a redesign of EH&S business processes to get a good return on investment.

Small, Medium, Large. Solutions come in different sizes small, medium, and large. They range from focused to integrated, and from "band-aids" to complete IT realignment. Beware of quick fixes. Consider a medium-sized effort that addresses broader process issues and uses IT to support or leverage the compliance processes to gain greater returns. If you need a complete overhaul, spend adequate time scoping and planning how the compliance system will meet your organization's objectives.

Being a market leader can provide your company with a competitive advantage, but it can also have drawbacks. It's more than acceptable to be in the middle of the pack, where you can benefit from others' experiences, but being a laggard and, thereby, delaying or ignoring the need for IT, may bring you into compliance late. If you have not begun to evaluate how to apply IT solutions to your compliance needs, you may already be late. Address your concerns, and get started! em