What Customers Seek in
EH&S and Sustainability Software

by Jill Gilbert

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The environment, health, and safety (EH&S) and sustainability software market must constantly reinvent itself. This requires keeping on top of regulatory and business trends, customer needs, and emerging technologies. Now is an exciting time for the market, as industry analysts show untapped market potential and predict increased spending over the next three years.[1]

Software-enabled EH&S management systems are relatively immature when compared to other business functions. Most organizations that install enterprise-wide EH&S systems do so well after they install financial, supply chain, human resources, and maintenance work order systems. By the time they decide to invest in enterprise-capable EH&S and sustainability software solutions, many have a jumble of software applications and spreadsheets installed. As a result, EH&S information remains segregated, unavailable to those who need it to support business decisions.

What do customers seek when considering a large investment in an EH&S software solution?

Everybody's Doin' a Brand New Dance Now:[2] Consistent EH&S Processes

Most organizations perceive that they are unique; they conduct business differently than others. In reality, they are not so different. While regulatory standards and industry operations vary widely from company to company, the business processes are similar. This allows organizations to adopt standard ways to perform day-to-day tasks, enabled by software.

Doing things "the way we have always done them" no longer works well for organizations with decentralized, inconsistent EH&S management systems whether paper- or computer- enabled. These organizations see the value of adopting the combined best practices of their company, their industry, and other industries. The old way, decentralized EHS, results in multiple, inconsistent processes and redundant software applications.[1]

The Monster Mash:[3]
Leverage or Replace Legacy Systems

Companies in general use assorted paper- and software-based EH&S systems, including a host of spreadsheets (See *IT Insight*, "Managing Spreadsheet Risk," October 2012). In four recent cases, mergers and acquisitions drove clients to implement consistent, enterprise EH&S business processes using an EH&S software platform. A mash-up of legacy systems will not enable data sharing, data roll-up, consistent metrics, or a single source of the truth:

• One company became an industry leader overnight after two acquisitions. EH&S spreadsheets that create "data silos" will not meet the company's needs moving forward.
• Another doubled its size through a merger and found that the legacy EH&S software applications will not support the complex, growing needs of the new company.
• A third company expects to grow by a series of acquisitions over the next five years. Their primary EH&S systems are not deployed company-wide and use older technology that they can no longer support.
• A fourth, multi-sector company plans additional acquisitions. Their legacy systems, limited EH&S and IT staff will not support future growth.

Waiting for the World to Change:[4]
Software as a Service

Many organizations would not consider Software as a Service (SaaS) five or ten years ago. Now they embrace SaaS, for several reasons:

• the ability to leverage limited IT resources, leveling the playing field for small and large companies;
• the ability to transfer risk to the software provider for software development, maintenance, and upgrades;
• tax advantages of subscriptions (operating expense) vs. large, up-front perpetual license fees (capital expense); and
• little or no new hardware is required.

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Here, There, and Everywhere:[5]
Localization
Global organizations manage a range of operations in different regulatory jurisdictions, cultures, and languages. While English is a universal technical language, these organizations want multilingual capabilities—from software screens and documentation to reporting, also known as "localization." Leading software providers offer the ability to quickly display the same screen in different languages. They also offer the ability to use different currencies and units of measure. Then again, organizations should keep the data itself in a single language for quality assurance purposes.

If You Build It, They Will Come:[6]
User Adoption
Users will not adopt software just because it's there. Software must meet user needs and fit the organization's culture and maturity level. It must use familiar terminology. Most important, software must be easy to use and easy to configure.

Leading vendors invest in user interface design for more intuitive data entry, display, and reporting. At a recent EH&S software user conference, a sneak preview of an upcoming interface received applause!

Vendors that want customers to be self-reliant also invest in ease of configuration. Customers can use "drag and drop" tools add new user accounts and create reports, forms, and dashboards, without the need to know how to write software code. This allows a custom look without customization, enabling easier software upgrades and maintenance.

Time After Time:[7]
Standard Connectors
I have seen an increase in the number of rapid implementations. Customers today demand rapid software roll-out; most are not willing to wait 18-36 months for a comprehensive implementation. One of the largest variables is the time needed to build interfaces between the EH&S system and other systems that feed data to it.

The availability of standard interfaces to other systems would provide value by accelerating roll-out. Software providers should offer standard interfaces with common process data historians, continuous emission monitoring systems (CEMS), regulatory content providers, and enterprise resource planning (ERP) modules that feed data to the EH&S system. Time after time, even with said standard interfaces, it seems that each system interface is a unique build that requires significant time and effort. Why must customers rewrite software code each time?

I've Got Sunshine on a Cloudy Day:[8]
Mobile, Social, Cloud, and Big Data
Vendors have begun to incorporate these technologies (See *IT Insight*, "The Perfect Storm of Mobile, Social, Cloud, and Big Data," April 2013). Mobile technologies allow 24/7 access from stationary and mobile devices. Public, private, and hybrid "clouds," plus social networking tools, offers a wealth of data sharing and collaboration capabilities. And "big data" enables rapid data mining and trend analysis of very large data sets, 1 terabyte or more.

Customers today demand more of their EH&S and sustainability software. The ability for the software market to respond to the need for consistent processes, centralized systems, and globalization will result in continuous improvement for years to come. New software delivery methods and pricing models and making software easier to use and maintain will help to build a loyal customer base. **em**

References
1. *Understanding the EH&S Software Market*; Verdantix, July 2013; available online at www.verdantix.com/index.cfm/papers/Products.Details/product_id/564/understanding-the-eh-s-software-market/.
2. Carole King and Gerry Goffin, "The Loco-Motion," 1962 (performed in 1962 by Little Eva).
3. Bobby Pickett, 1962.
4. John Mayer, 2006.
5. John Lennon and Paul McCartney, 1966.
6. *Field of Dreams*, 1989 (with artistic license).
7. Cyndi Lauper and Rob Hyman, 1984.
8. Smokey Robinson and Ronald White, "My Girl," 1964 (performed in 1964 by The Temptations).

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