The EH&S and Sustainability software market has quite a history as it reaches the 30-year mark. It began with a few small software applications used by a handful of EH&S professionals—with little or no data sharing. Today, it is a multi-billion-dollar market with thousands of applications ranging from point solutions to enterprise-capable, Web-based solutions. This column discusses how the market has transformed over the years and explores market trends.

Market Transformation
The EH&S and sustainability software market as we know it today grew when PCs became readily available in the mid-1980s—at $2,000 each. Software vendors designed PC-based “point” solutions for EH&S professionals. Data access was limited to the few people with the software installed on their PCs (see Figure 1). These point solutions largely dealt with regulations that came after the U.S. Congress established the U.S. Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) in December 1970. By the mid-1990s, EH&S software firms provided client/server applications that could serve multiple sites and thousands of users across the business enterprise. Organizations installed these applications “on premises.” The software still catered to EH&S professionals, but started to gain popularity among operations users. These enterprise EH&S applications allowed integration with other data sources, such as process data historians and human...
applications focused on certain EH&S and sustainability functions (see Figure 2).

**Trends**

**Spending**

I have observed increased spending on EH&S and sustainability software over the last few years in the following areas:

- for new EH&S management information systems initiatives in oil & gas exploration and production, midstream energy, and manufacturing;
- for “rip and replace” of older systems in industry sectors with established EH&S management information systems;
- to replace custom-built legacy systems with commercial EH&S and sustainability software when old systems no longer meet needs or are too costly to upgrade; and
- to take advantage of newer information technologies to gain competitive advantage.

Independent research verifies that this trend will continue. In its *2012 Green Quadrant for Environmental Management Software*, Verdantix found that 60% of companies with revenues of at least $1 billion will increase spending on environmental management software, while only 7% plan to decrease spending over the next three years.\(^1\) Verdantix also found that 58% of companies in a

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**Figure 1.** EH&S and sustainability software market transformation, 1985–2015.
Many enterprise EH&S vendors take these needs to heart. More and more software takes advantage of emerging technologies—such as mobility, Cloud, Big Data and Analytics—that make a single, centralized database less important to the end user. These technologies allow enterprise EH&S software to draw upon multiple data sources to allow near real-time decision-making, with improved interfaces that appeal to a range of users.

**Market Growth and Consolidation**

The enterprise EH&S and sustainability software market has grown and consolidated in recent years. French software provider Enablon (www.enablon.com) has made quite a splash in the United States over the past four years and announced plans to grow their business in new global markets. German software giant SAP’s (www.sap.com) top spending areas in the near term include mobile applications and EH&S. Global information provider IHS (www.ihs.com) has built a powerful EH&S software business by acquiring a number of software brands over the past few years. California-based software provider Enviance (www.enviance.com) has gained market share in recent years.

All four of these companies figure prominently in the Verdantix Green Quadrant report. Of these companies, the Groom Energy Buyers’ Guide to Enterprise Carbon Accounting (ECA)/Sustainability Software lists Enablon among the top five market leaders.

**Looking Ahead**

What does the future hold? Expect the EH&S management information systems market to continue to transform itself to meet customer demands and to take advantage of emerging information technologies.

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**References**