

# The EH&S and Sustainability

by Jill Gilbert

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The environment, health, and safety (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



# Software Market Grows Up

resources databases. Enterprise software allowed data sharing across the enterprise for any user with a PC connected to the network. Software packages were largely compliance-focused and regulation-oriented.

Climate change, greenhouse gas emissions, and sustainability issues gained ground from the mid-1990s on. By 2005, EH&S-focused and non-EH&S-focused software firms used Web-based technologies to appeal to a broader market. Slowly, the market began to accept applications hosted by the vendor and accessed via Internet.

By 2010, Software as a Service (SaaS) replaced hosted EH&S software as organizations became comfortable with Web-based software in other business functions. Companies integrated their EH&S software with a number of other systems. Web-based applications allowed data sharing across the enterprise with anytime, anywhere access to users around the world, with near real-time data. Today, organizations are starting to embrace Cloud data storage and mobile applications.

Over the past 10 years, the EH&S and sustainability software market consolidated via acquisitions, leaving a few enterprise EH&S software providers and a dozen or so mid-market providers, plus thousands of firms with multi-point software

applications focused on certain EH&S and sustainability functions (see Figure 2).

## Trends

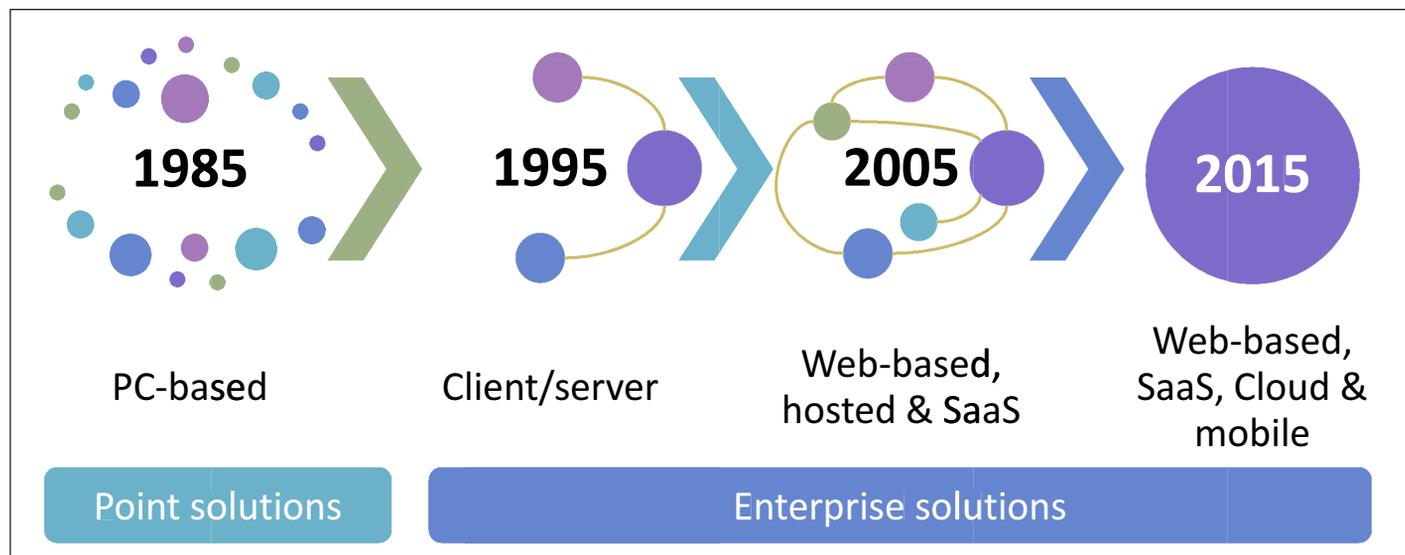
### Spending

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.<sup>1</sup> Verdantix also found that 58% of companies in a

Figure 1. EH&S and sustainability software market transformation, 1985–2015.



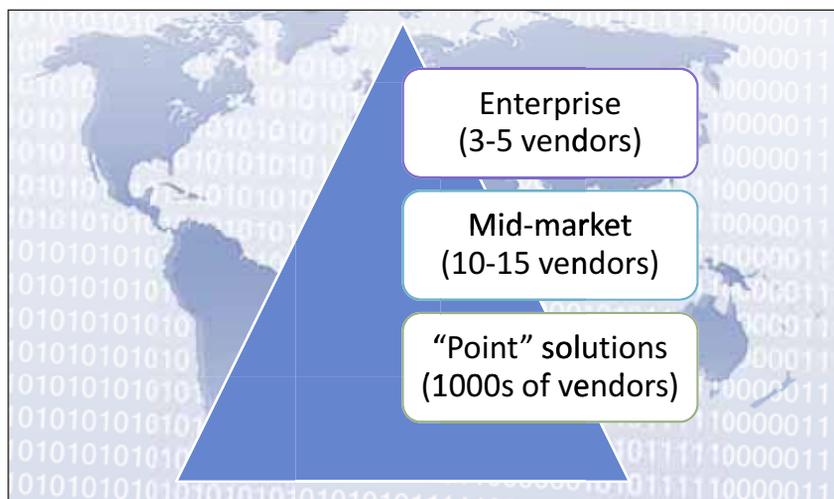


Figure 2. EH&S and sustainability market segments by focus.

larger, global, sample plan to increase spending on sustainability in 2013 over 2012, while only 4% plan to reduce spending. Sustainability budgets will grow at about 3% to 6% in 2013.<sup>2</sup> Groom Energy says that while the market for enterprise carbon accounting/sustainability software (an EH&S software submarket) has slowed, they project 20% to 30% growth going forward.<sup>3</sup>

### Market Needs and Vendor Offerings

The market needs software to support

- initiatives that elevate EH&S and sustainability issues to the Boardroom level;
- a continued increase in regulatory obligations and industry guidelines;
- overlapping reporting requirements that pull data from multiple sources;
- increased use of software in operations, where much of the EH&S data originate; and
- ongoing use by EH&S professionals and management.

While the need for EH&S software remains strong, sustainability remains an emerging issue. Even though more firms participate in the Global Reporting Initiative each year, only 21% of CEOs view sustainability as having a large financial impact today.<sup>2</sup>

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](http://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](http://www.sap.com)) top spending areas in the near term include mobile applications and EH&S. Global information provider IHS ([www.ihs.com](http://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](http://www.enviance.com)) has gained market share in recent years.

All four of these companies figure prominently in the Verdantix Green Quadrant report.<sup>1</sup> Of these companies, the Groom Energy *Buyers' Guide to Enterprise Carbon Accounting (ECA)/Sustainability Software* lists Enablon among the top five market leaders.<sup>3</sup>

### 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. **em**

### References

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