Anna M. Clark, President of EarthPeople Media (www.earthpeoplemedia.com), author and contributor to Huffington Post and Greenbiz.com, moderated the panel. Here are my remarks, which provide success strategies for EHS IT initiatives.

**Embrace Emerging Technologies**

*Anna Clark:* Jill, you have decades of hands-on experience in industrial, software, and EHS and IT consulting services. How has technology evolved to help companies improve EHS processes?

*Jill Barson Gilbert:* Emerging technologies change the way people work. In the energy industry, unmanned aircraft gather information on exploration and production activities and pipeline status. This reduces resource needs, as well as the risk of putting people in the field. The EHS parallel uses IT tools and software to gather data on operations and compliance status, relay that information to operations and EHS managers, and create useful, “actionable” information. Also, automating EHS business processes reduces the risks of data duplication, data entry errors, e-discovery, missing compliance targets, etc.

Some of the hot technologies of 2015 are the Cloud, Internet of Things (IoT), Content Management Systems (CMS), mobile technology, and social and collaboration tools. More and more organizations are moving their EHS applications...
to the Cloud (see: IT Insight, February 2015 EM, 2015 Forecast: A Bright Future for the Cloud). Companies should take advantage of these emerging technologies, as well as some more proven IT tools.

Clark: Jill, what conditions prevent companies from embracing the new opportunities that emerging technologies present?

Gilbert: There is a short-term vs. long-term perspective in the U.S., with a focus on this quarter’s profits. The energy industry is experiencing budget and staff cuts, with lots of “hand-wringing” in the upstream energy industry, following a record year in 2014—the best in perhaps four decades. At the same time, the chemical sector is having one of its best years in four decades. New plants and projects are being built or are in progress. Also, many opportunities exist in the automotive and transportation (rail, pipeline, truck, etc.) sectors.

However, some companies still fail to view the big picture. They need to evaluate risks and opportunities, as well as the long-term impacts and business benefits of implementing new technology, including the risk of doing nothing. “We don’t know what we don’t know.” (see: IT Insight, October 2014 EM, 21st Century Energy Boom and Greater Risk Awareness Drive EH&S Software Initiatives). Investors are backing the upstream energy industry while prices are low, and I think that some of the upstream EHS IT projects that were postponed this year will start next year.

Tackle EHS System Selection Challenges

Clark: Jill, you have done extensive work evaluating business requirements to help companies choose the appropriate EHS system. What are some of the challenges companies face when selecting EHS systems?

Gilbert: When companies look to information systems to automate and improve their EHS business processes, they face at least four challenges:

1. Identifying what stakeholders need and setting evaluation criteria before evaluating solutions.
2. Securing executive sponsorship and support rather than starting a grassroots initiative.
3. Aligning (or converging) with corporate and IT strategies.
4. Focusing on total cost and business risks/benefits over the lifetime of the system.

Companies should spend adequate time up front, defining a cohesive set of business requirements that reflect the consensus of stakeholders. Poor requirements are responsible for high IT project failure rates. Then, because organizations do not have unlimited time and resources (people, tools, money), they should prioritize their needs. These prioritized needs set the stage for software evaluation and selection, and then implementation.

I recommend that organizations set objective software and vendor evaluation and selection criteria before speaking with vendors. Software evaluation and selection must include objective criteria that allow the organization to select software/platform that not only meets their top priorities, but also allows for future growth and expansion of capabilities.

Secure executive sponsorship and support early—and keep the sponsors engaged throughout! Grassroots initiatives rarely get off the ground, and those that do, often fail. EHS initiatives must align with corporate strategies and objectives and must consider IT strategies, as well as other IT systems and initiatives.

With technology changing so quickly, it is important not only to align with corporate strategy, but also to understand how the proposed EHS IT solution will fit with other systems and overall IT strategy. For example, many companies are moving to Cloud solutions for EHS data management.

EHS software can be a large investment so the business case (justification) must consider business risks and benefits. Finally, total cost of ownership (TCO) is important. Look beyond license/subscription fees and implementation fees. Part of the payoff of developing a good set of requirements and a sound business case can be 3 to 10 times or more (see: IT Insight, October 2013 EM, Making the Case for EH&S Software). 

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