

NOTES FROM BREAKOUT SESSION AT THE 2011 C2E2 CAMPUS EH&S SOFTWARE TECHNOLOGY WORKSHOP HELD AT UMASS AMHERST

April 14, 2011

Breakout groups were asked to generally discuss individual's needs with respect to the breakout topic, and identify (1) greatest value of solutions in the particular topic area, (2) the greatest challenges, and (3) necessary tools and resources going forward.

We offer notes on two of the Breakout Groups

OPPORTUNITIES TO COLLABORATE ON A STANDARDIZED, HIGHLY MODULAR, SCALABLE EH&S SYSTEM

The most popular breakout session had two groups; one facilitated by Bob Foster of EH&E and one by Mary House of Woodard & Curran

Notes from Bob Foster, EH&E

RE: Lab Inspections

- Users would like to have iPad or tablet to do inspections. Eliminating paper and therefore time.
- Would like to be able to choose types of inspections per lab. A way to sort in the field what questions may be applicable to a specific lab. i.e. a Heavy Chemical use lab may have more questions/observations relative to chemical storage, use, handling.

General issues/concerns:

- Centralized location to roll up the data from multiple sources and pieces of software. Many EHS managers are gathering data from other sources and offices across campus. This is a manual task and requires a lot of follow up and person hours.
- Would like a way to track tasks centrally that is easily accessible. Then they would like this task list to expand in support of additional activities related to task completion (inspection records for example)
- If an organization has data in many places, they are finding that the same data being entered by multiple people in several different data bases results in loss of data integrity. Organizations must make these databases accessible and allow for multiple users to update and maintain that data set.
- Concerning the development of "Apps": This does not seem like a realistic idea for many of the attendees. Instead of spending time and money on developing "Apps", why not spend that energy and time on developing websites, accessible to many users, that are easy to navigate, well organized and allow for the data collection in one place.

Web based applications do tend make users wary due to concerns over data security. Security should be considered when attempting to develop an online software solution.

- Any new solution can generate varying levels of sensitivity among the workforce or other departments within the campus. Any change from the way things used to be handled (electronic forms, web-based data collection) workers/users tend to be reluctant to fall into a new routine. Levels of frustration run very high and it takes very little for many involved to simply say the system does not work and refuse to use it.
- Most program development initiatives tend to be driven by outside forces such as regulatory agencies imposing fines or requirements of insurance companies.

Why are home grown solutions so popular? (homegrown meaning solutions are developed by the institution using internal experts)

- Building solutions internally typically gets you closer to what you want for a price you can afford.
- In most institutions development costs are not tracked vs. capital costs

Notes from Mary House, Woodard & Curran

- Common functions include regulatory activities, inspections
- Common challenges include the amount of groundwork to be done and who does it and who pays for it
- Benefit of using an open framework and learning from and relying on a single module.
- One school reported that they used many specialized software applications, including security issues. EH&S wants vendors to know and understand their business activities as well as their IT needs. This school is interested in the lab assessment tool being developed at UCLA. They are also looking at SharePoint.
- Servers/security continues to be an issue, although less so than a few years ago.
- Dashboards are also something people want these days.
- Many agree of the need to bring in all the safety, training and compliance modules into one, integrated package, although some are unconvinced of the cost/benefit of the holistic, integrated system.
- The value of a central repository for core data is generally agreed upon. Some concerns about availability of sensitive information
- Need to drill down data is critical. Often missing from current software applications.
- Concerns with vendors going out of business or raising expenses
- Capturing pictures in software is now an important piece. For example, iPad brought into lab; report, with pictures, sent from lab to PI, Dean, Provost; Follow-up tracked by software
- One small school noted that “it is a dream” to get software beyond Excel or Access
- Another school mentioned its use of On-Site systems
- Challenges with customer support for inexpensive EH&S compliance software by smaller vendors.

- Reaction of PIs is interesting. Some ok, while others need extensive hand holding.
- According to UTexas, their PIs are successfully using a lab module, used by many other universities, and are trying to set up a user group to leverage support
- Timeframe: if you never start you never get finished

HOW TO WORK WITH IT OR IS

Notes from John Dahlstrom, Yale University

- Many end users of software have difficulty explaining software issues to a supervisor. Lack of common language; user perspective vs. software engineer or programmer perspective
- How to engage best with IT?
- IT Team - External facing with customers AND internal custom development
- Users learn to expect from IT about budgetary and resource constraints. What can end user rely on IT for?
- Incorporate technology BETTER with (a) day to day activities and (b) core business with ultimate user – the PI
- Important to know where software is hosted to understand level of IT infrastructure support; where (and what is in?) is the data warehouse?
- A number of universities use an informed third party to interact with IT more knowledgeably
- By partnering with other departments, EH&S can gain further clout
- Key issues – Training, inspections, authorization and inventory
- Range of staffing levels at universities; from FTE IT person within the EH&S Department to no assistance to third party who helps support
- Great value in finding other schools with comparable issues (good or bad) with their IT support and understanding that relationship
- Ultimately, software issue is a process issue.
- Important to understand what IT is (and is not) capable of doing for you.
- Important to always have solutions to software problems be user friendly
- Rely on as much core university data as possible
- Students may be able to help. Don't underestimate their potential contribution.