



JANUARY 2017

Careful Management Helps a Legacy System Withstand the Test of Time

A Case Study Featuring Abbott Laboratories



This case study is part of NAEM's report on "Approaches to EHS & Sustainability Data Management." This series of case studies explores how organizations from different industries meet their unique data management challenges. To read the full series, visit www.naem.org.

Letter from the Executive Director

If NAEM's benchmarking research has taught us anything, it's that no two companies solve the same problem the same way. Even in a field where environment, health and safety, and sustainability programs often have similar elements, individual leaders need to understand how to adapt core concepts to the particularities of their own company's organizational structure, operations and culture. This is nowhere truer than in the area of EHS&S data management, where commercial software systems offer centralization and automation, as long as practitioners understand their organizations well enough to configure these systems to their needs.



And there is no one practice or approach for solving a complex problem like that.

To understand a challenge like data management, it's useful to hear from a variety of peers, to learn what worked and didn't work so well, and allow their experiences to inform your own. That is what this report is intended to do. As the latest installment in NAEM's research on EHS&S Software and Data Management, this report gives you a peek inside how a diverse group of companies use software tools to organize their EHS&S information and communicate their performance.

In reading through these case studies and interviews, I was struck by what a creative a problem-solver you need to be to find the best solution for your company. Insofar as no two companies are alike, one system does not always fit all. I was also reminded of a maxim that seems to emerge at every NAEM Software and Data Management conference we've hosted since 2001: Data Management is a long-term journey that requires vision, leadership commitment and continuous improvement.

We hope that this report helps you understand how your experiences compare to those of your peers and gives you some ideas you can use to help you refine your path forward.

Sincerely,

A handwritten signature in black ink that reads "Carol Singer Neuvelt". The signature is fluid and cursive, written in a professional style.

Carol Singer Neuvelt
Executive Director, NAEM

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Case Study on Data Management



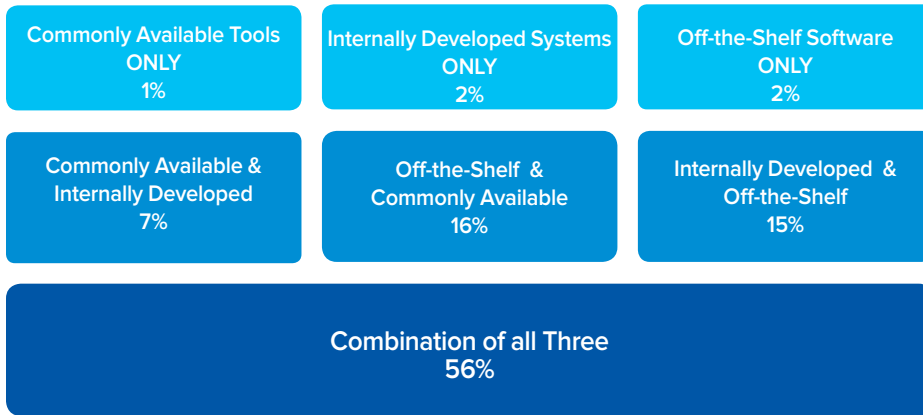
For any EHS and Sustainability leader who has had to manage vast amounts of data, it's tempting to think that there might be a software tool, or one strategy out there, somewhere, that could meet all of your needs. Unfortunately, the experience of those who have selected, implemented and managed these systems suggests this is not the case.

Indeed, a number of variables help shape a company's EHS&S data management strategy, including organizational design, internal culture, types of operational risks and the level of external scrutiny to internal operations.

It's perhaps not surprising then, that among the 165 software users NAEM surveyed about their company's data management approach, 56 percent are using a combination of commercial systems, internally developed software and commonly available tools, such as Microsoft Excel.

Current Data Management Approach

Figure 1



N=164

As the EHS&S software offerings become increasingly sophisticated, more companies are adopting commercial systems to centralize data collecting and reporting.

Common Reasons Why Companies Use More than One System

While software tools for the environmental, health and safety, and sustainability professional have rapidly matured over the past decade, more than half of those surveyed by NAEM still use a combination of commonly available tools, internally-developed software and commercial systems to manage their data. The reasons, according to research participants, may include:

- Decentralized structures may not lend themselves to a centralized reporting systems
- Diverse operations may produce a variety of data types
- Individual operations may have unique risks that require targeted solutions
- Internal culture may value decentralized decision-making
- Acquired businesses may have their own software tools
- Legacy tools may be better aligned with organizational needs



Even so, the scope of these implementations vary widely from company-to-company. A single company may use an enterprise-wide system to manage its corporate standards, for example, while its individual business units use different combination of software systems to meet their own unique needs.

This is often the case for companies that have gone through a merger or acquisition, where the new business entities bring new assets but also their own approaches to data management.

All this makes standardizing corporate processes, or adopting any single system, exceedingly difficult. But as Jason Schmitz, Director of Trinity Consultant's T3 Group points out, perfect integration and standardization may be an unattainable ideal.

“It’s very easy for the human brain to say, ‘We’d really like to have everything in one nice, neat, tiny bow. The fact of the matter is that these organizations are diverse; they grow; they contract; people come; people go; the organization restructures; people get new roles and responsibilities.”

“It’s okay to not have perfect data because you’re not going to have perfect data...you’ve got to figure out what you can tolerate,” he said.

Regardless of a company’s EHS&S program maturity, business objectives or budget, software tools remain just that—a conduit for collecting information. It’s how well an organization aligns around a vision and commits itself to continuous improvement that truly holds the key to success for any data management program.

“The hope is that you master one area and then you go onto the next top priority and master that,” Mr. Schmitz said. “Data management is an evolution.”

In the interviews and case studies that follow, we will examine how different companies evaluated unique data management challenges, and identified solutions to address their business needs. We’ll also explore how they solved problems today while positioning their programs on a long-term path for growth.



Careful Management Helps a Legacy System Withstand the Test of Time

Two decades ago, when Abbott Laboratories first developed its internal EHS management information system there were few alternatives that could meet its needs. In this interview, Principal EHS Specialist Lisa Marx explains how the company has managed user input and invested in system upgrades to keep it relevant over the years.

When Abbott Laboratories built its internal EHS software platform more than a decade ago, it did so because the commercially-available options at the time did not meet its needs. Despite changes in the company's IT strategy over this time and new options in the marketplace, its legacy EHS system has withstood the test of time, thanks to careful application management and ongoing investments in the system.

One of those more recent updates was the development of an integrated scorecard, which captures key metrics in live time for areas such as: injuries and illnesses, significant incidents. Depending on the manufacturing site, the environmental data is reported on either a monthly or quarterly basis. The corporate team then publishes the updated EHS snapshot to senior management once a month.

“Having the data updated more frequently gives us a better view overall of how our EHS programs are doing so that we can be prepared to be sure that we're hitting our externally communicated targets,” explained Lisa Marx, who is responsible for global corporate EHS standards and web applications.

In addition to the scorecard, the team also sends out alerts for any incident that is determined to be ‘significant’ under the corporate standard.

These standards and procedures are also built into the system, a distinct advantage of having developed the software in-house, Ms. Marx said.

The software also has a function that manages the company's organizational hierarchy from the corporate level all the way down to the department and the individual employee. With more than 1000 users logging in to complete action items or to capture data from various parts of the company's EHS program, the company relies on its EHS leaders to ensure the information is being entered correctly.





The first step in the quality control process is the site-level EHS manager, who reviews incidents are entered properly before it rolls up to the division-level EHS manager.

“The divisional managers don’t have to go into each record,” Ms. Marx explained, “but they’re pretty in tune with their division’s safety performance, so they can go in and review the metrics and if something looks off, they flag that.”

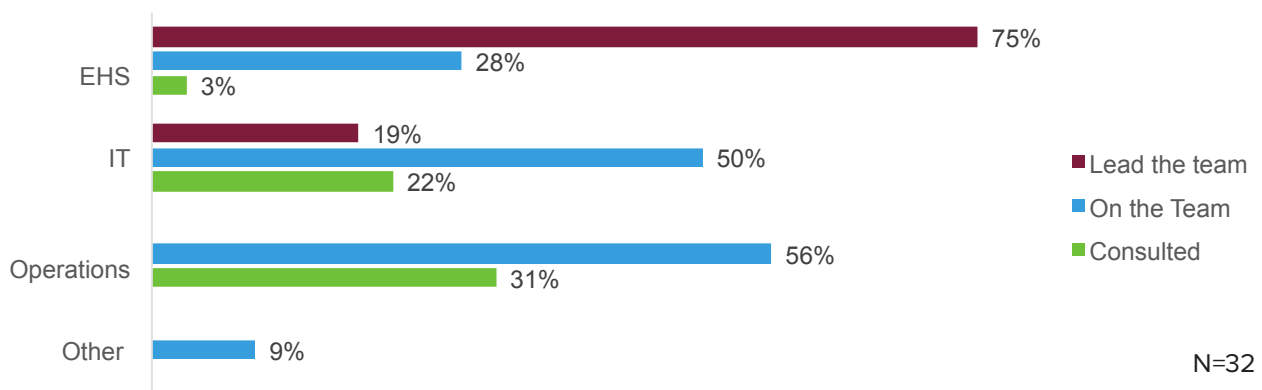
Then, the data is reviewed by the corporate team, where Ms. Marx is responsible for the health and safety metrics and a team of colleagues manage the metrics on the environmental side. The team validates the data every quarter, and goes through a third-party assurance audit annually.

These built-in checks are supported by the system itself.

“If there’s a greater than ten percent difference in the environmental metrics versus the prior reporting period—whether that’s an increase or a decrease—they have to add a comment to explain that in the system,” she said.

Functions Involved with System Management

Figure 4



The functionality meets the company’s basic reporting needs, Ms. Marx said, but like any other system, it has its detractors, too.

Her solution is to work individually with users to identify existing functionality that could meet their needs.

“We also try to provide more training on different aspects of the system. Our system has pretty good online help and definitions...but sometimes just having a conversation with someone if they’re struggling [can make the difference],” she said.

For user issues where the software is not performing as intended, the IT team documents these through its ‘bug tracker’ and then evaluates its importance to the business.

“Sometimes there’s a bug that we can live with, or there’s a workaround. If there’s not, then we have it on the list,” Ms. Marx said.

And because the application is a continuous work-in-progress, the company has benefited from the option to slowly invest in the attributes that they needed, a strategy that mitigated the impact on the budget as well.



Lessons Learned

No matter the maturity of your data management program, there are certain lessons that seem universal to all companies. These include:

1. **Data management begins with establishing a basic set of standardized work flows:** “If you don’t have the processes where we have a common definition and terminology for how we do things and what information we collect, and what exactly that information means, you can’t deploy any software much less an off-the-shelf version.”

2. **Every EHS&S data management system will need cooperation from other functions to be effective:** “The art of organizational change management is huge for putting in new data management systems, especially if you’re relying on a network of people or upstream business processes.”

3. **A data management system is only as accurate as its users:** “If executed properly, [most business processes] produce high-quality information. The problem is that without the knowledge, the skill and the capability, people sometimes just get it wrong.”

4. **Each solution has its quirks:** “There’s no system that users say: ‘It’s so great, I really love it,’ People always have their complaints.”

5. **Data Management is a journey of continuous improvement:** “Sometimes you’ve got to put a stake in the ground and move forward and use that mark as your starting point for [further improvement]”



6.

Don't rush into a decision: "Take your time to review what is out there because an EHS software platform is a long-term commitment. It's not a project that you do for one or two years: This becomes a corporate solution."

7.

Know your Audience: Work for the target audience or customer base. Know who will be using the system and what it will be used for. Organize data or information that makes sense to the user and helps them make decisions in a timely manner and take action.

8.

A complicated problem doesn't require a complicated solution: "It is best to match your organizational requirements and assess as to what solution works for you. The solution must be cost-effective relative to the compliance risk. Don't buy "Cadillac" if the need is not there."

9.

Progress is not always a straight line: "As you continually improve, you get the curveballs of change that may take you two steps forward, one step back. Whenever you're in the middle of that, it might not look so pretty but as long as you're vectoring in the right direction, I think that's the most important thing when it comes to data management."


10.


The more data, the more work: "Once you create more data for yourself, you create more problems for yourself. You never used to know about those incidents that occurred. Now that you've got that granularity, you've got a problem that you've got to deal with. The overwhelming amount of data that you're going to create might actually make your job harder, so you've got to be cognizant of that."



Read the Full Case Studies Series

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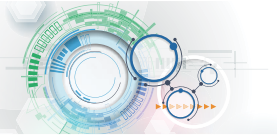
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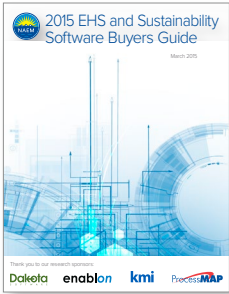
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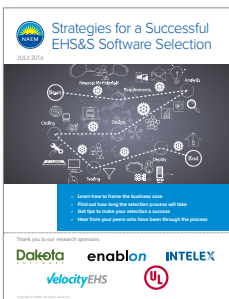
NAEM provides valuable resources for corporate EHS and sustainability leaders and IT professionals who are responsible for selecting, implementing and maintaining software systems, and who are looking to better manage and report their data.



2015 EHS&S Software Buyers Guide

This report, which includes data from 165 in-house EHS and sustainability leaders, addresses common questions from a peer perspective, including: business objectives for software purchase, the desired software capabilities, peer spending and expected maintenance costs. The detailed analysis also incorporates the perspective of past purchasers to provide shoppers with a comparison between their expectations and the experiences of those who have recently gone through the process. An update to this report will be published in March 2017.

Download Free Report: www.naem.org/?survey_2015_ehsmis



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For More Information: www.ehsmis.naem.org/



Acknowledgments

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