



How to find and buy great EHS software

Environmental, health and safety (EHS) management systems are complex creatures. Each organisation is slightly different, with different requirements depending on the industry, location and size. This can make designing software for EHS personnel difficult. One option is to offer customized software packages, but that option is often costly and difficult to maintain over time. After five years of working on software for professionals in North America and around the world, we wanted to share some lessons learned.

Henry Ford once said, "If you need a machine and don't buy it, then you will ultimately find that you have paid for it and don't have it." One hundred years later, this statements holds true and perhaps applies even more so to our modern machines - software.

A short version of this post can be found in a talk on purchasing EHS software packages as that I delivered at the 2012 Auditing Roundtable Conference in Baltimore, USA. Slides can be found here:

<http://www.slideshare.net/jonathanbrun1/auditing-roundtable-conference-2012-choosing-the-best-software>

The value of great software

Too many companies assume that their staff can continue to manage the multitude of compliance information being thrown to them from the information age, without the aid of software-based legal compliance tools. While these companies wait, their risks pile up. With the right tools, an employee can often accomplish their work more efficiently. From cars replacing horses, to excavators replacing teams of shovelers - machines have the ability to take production to an entirely new level of efficiency. In the 21st century, smart software has become the most effective tool to dramatically improve production and reduce errors. Great software helps an organization avoid mistakes and free resources to further improve production of your core service or product.

Of course, purchasing the wrong software can be equally damaging to your bottom line. Time spent on technical support, training on complex and unfriendly systems can eat away any gains you were hoping to make. That is why it is essential to understand what makes a good piece of software great and what makes some, very, very, bad.

Keys to purchasing the right software

When you purchase a new machine, you ensure the decision makers are both the people who will use the machine and the managers who need the output of the machine to match their



business expectations. If we could boil down our tips to just three take-aways, it would be this as follows:

1. Test before you buy;
2. Ensure the testers are the actual users; and
3. Consider modifying your workflow to meet an existing software package.

Testing

Testing software is absolutely essential to knowing if it is the right fit. The only way to know if a piece of software is right for your organization is to set-up real users, input real data and take it for a spin. While this exercise can seem time consuming and expensive, the potential cost of jumping onto a bad piece of software is significantly higher. Corporations tend to stick with a piece of software for at least five years. If you quickly calculate the hours potentially saved or lost due to a poor purchasing decision, it is clear that forty hours of testing and trials will pay huge dividends over time. Put simply, imagine yourself buying your car without test driving it.

Too often, software is purchased by top level managers and the actual users are not consulted. The purchasing parameters for a manager are very different from a user. Beyond the sheer frustration of being forced to use a piece of software you hate, the costs involved in using poor software greatly outweigh the cost benefits that a top level manager might see on paper. Many software packages sold to companies tout a long list of features that managers think they need, but in reality don't. Far too little attention is spent evaluating the ease of use and friendliness of the tool.

Find the real testers

To ensure your testing is done properly, a key initial step is to identify and describe the way you and your colleagues will use a piece of software to improve their daily work. Once that is clearly defined, ask each of them for their input on the most time consuming portion of their daily work for environment, health and safety compliance.

Many software advertisements, such as this one by Intalex (<http://www.youtube.com/watch?v=WcdVhcGwmaw>) target top level managers who think they need X, Y, Z, without consulting their staff first. You will notice that the ad shows nearly nothing of the software, how it looks, or how it is used - it is all conceptual. In contrast, when you walk into an Apple Store, the first thing you will notice is the ease of access to the products, you can see, touch and play with them. A typical Apple ad, [like this one](#), shows real people using the software in the real world. Any software maker worth their shirt should be comfortable letting you play with the software, if they want you to jump through hoops, do webinars, and provide all of your contact details for a demo account, run away!

For example, on your smartphone, there are hundreds of thousands of potential applications you could download. Yet, I will venture to guess that even if you downloaded many apps when you



first bought the device, you only use 3 - 5 of them on a daily basis - Mail, Weather, News and a couple more. Ultimately, you use the apps that reflect your interests and your daily habits. You should pick your environmental, health and safety software the same way, find a software package that fits your current workflow, but that simply makes your workday more efficient.

Many organizations are tempted to build their own solutions, because they think they have special needs. I would warn all of them that customizing software costs a great deal and this is especially true if you are not already an expert at it. The costs of building a software package and then maintaining it can quickly spiral out of control. That is how many software service companies have produced so many billionaires! Modifying software is very similar to house renovations, you always expect them to be cheaper than you think and they are always harder than expected.

Change your habits

The simplest way to save money on software packages is to be willing to modify your workflow a little bit to fit the workflow of an existing software package. Ideally, you want to find a software package that is already being used by industry leaders (not laggards) and adapt your way of working to it. The iPhone has been particularly successful because it forces an interface and system onto you, you can barely change anything on the iPhone, but that allows Apple to ensure it spends all of its time on making the product world class. If Apple were trying to make everyone happy you would likely end up with a bloated product that makes no one happy.

For example, at Nimonik we get a lot of user requests to change or add certain features. Our typical response is that we will consider it, but in reality we wait for at least 5 - 6 companies to request something before we build it. As someone once said, "You can please some of the people all of the time, you can please all of the people some of the time, but you can't please all of the people all of the time". All great products choose a portion of the community they want to please and develop a great tool for them. On the client side, the fastest way to improved efficiency and cost savings is to be flexible and slightly change the way you manage environment, health and safety compliance to match a great tool. I promise, this will be far more cost effective than trying to modify or build your own solution.

Conclusion

Picking a piece of software is as hard as buying a house or a car. You want to get it right and the wrong decision can cost a lot of time, money and sweat. Before you jump on board with any new product, be sure to research the products most common users, define the people at your organization who will be impacted and then take it for a spin. If all of that works well and you can clearly see the business case, take the plunge and give it a try for a full year, with an option to change after that.

Hopefully, these points will help guide your next EHS software purchase. Feel free to send him questions and comments at jbrun@nimonik.ca