

Special Report: Why Ergonomics Software Solutions?

Investments in ergonomic software solutions are on the increase, both in the number of companies implementing programs and in the size and scope of deployment. In part one, *ESM* July/August, CEOs from four of the top ergonomic software providers discussed some of the major issues and questions companies face when determining if they should make such an investment in their employees' welfare. This month, 5 Software CEOs join *ESM* for the second part of this discussion: Kim Lopez at Remedy Interactive (www.remedyinteractive.com); Ron Goodman at RSIGuard (www.rsiguard.com); Kevin Taylor at WorkPace (www.workpace.com); Ken Hayes at Ergosaver (www.ergosaver.com), and Steven Rudnick at Magnitude Information Systems (www.magnitude.com).

ErgoSolutions Magazine: What implementation tasks and infrastructure are needed for implementation, and how long does the implementation take?

Kim Lopez, Remedy Interactive:

Management's commitment is a critical factor for a successful implementation. At Remedy Interactive, we assist our clients through the rollout and implementation. We begin the process, working jointly with our clients to determine goals for rollout and to design an implementation plan.

We work with them to develop a plan for following up with employees of higher risk for injury. For many clients, that means automating responses, which can be handled by our software Platform (PMP). For others, it means integrating our Platform into already existing processes.

Some clients prefer to roll out in stages, others have rolled out to their entire companies in one week. Once rollout has occurred, implementation is an ongoing process. Our goal is to create an automated implementation process that requires as little effort on the client's part as possible. Using the process, employees assess, receive education and

information, reassess and receive additional information until, eventually, they lower their risk of injury.

Ron Goodman, RSIGuard: RSIGuard is installed on computers of some or all users at an organization. From a technical perspective, implementation is simple—requiring a few hours from an IT staff person. The ergonomics staff requirements are, however, quite variable depending on how they choose to use the software. RSIGuard can operate independent of any ergonomic staff involvement, so the required infrastructure is, effectively, zero. However, its benefit is fully realized when ergonomics staff analyze collected data and implement changes accordingly.

Some companies have implemented RSIGuard in an afternoon. Others may spend months doing QA testing, piloting with users, and developing an overall strategy for using RSIGuard.

Kevin Taylor, WorkPace: The IT demands of breaks and exercise software like WorkPace are quite low, and the software will normally work fine on all the existing computers and network infrastructure without adding any addi-

tional load.

Because the software supports automated rollout and training tools (www.WorkPace.com/wptrain_en) implementation across an organization is usually quite straightforward and can be done without any special training of staff required.

Most companies implementing breaks and exercise software like WorkPace run a pilot first on perhaps 40 users for 6 to 8 weeks. This pilot costs nothing, and provides proof of concept to the company that the initiative is effective.

Ken Hayes, Ergosaver: The two most important predictors of success are upper management commitment to change and access to basic technology. Managers need to realize that they have a responsibility and the cost-effective ability to reduce their employees' risks of injury.

As for technology, in Ergosaver's case, this means each employee needs access to the Internet or the company's intranet. Implementation can be almost immediate, or it can take up to several weeks, depending on the company's rollout plans and the scope of customizations.

Steven Rudnik, CEO, Magnitude

Information Systems: Most clients tell us that implementation of ErgoEnterprise is quite simple and straightforward. Once the customer has identified a server, the software is usually setup in less than an hour. We've had clients rollout in many ways from entire sites in a single overnight process to staged rollout by department or group depending on their needs. Having invented the Anti-Injury software category in 1995, we've been successfully working with clients for many years, and though client guidance have designed the software to support silent push outs and interactive installs specifically to minimize IT overhead.

Many clients have standardized on proprietary software distribution technologies and this is where Magnitude works with the IT groups to adapt to their specific needs by customizing or repackaging installers to meet clients' individual corporate standards.

ESM: What, if any, are the technical challenges associated with implementing a software-oriented solution?

Kim Lopez, Remedy Interactive:

Security: information about your employees is important data to your organization. Companies interested in a software solution should work with vendors that understand the sensitivity of such information.

Hosting/delivery: software solutions can be delivered using many different methods. Some methods of delivery require higher levels of involvement of the IT department than others; some allow for updates and enhancement more easily than others.

Ron Goodman, RSIGuard: There are

very few technical difficulties in implementing RSIGuard. The biggest issue that ergonomics groups face is getting their IT staff to be willing to implement a software tool on computer systems. IT departments are understandably fearful of adding any new software to a computer for fear of causing problems. Although we have a nearly perfect track record, IT staff often does not see the value of ergonomics in comparison to the perceived risk. In more than one instance, an IT person with an RSI has been a significant help in getting past the IT testing phase.

Kevin Taylor, WorkPace: Because the demands of breaks and exercise software are relatively low, there are no significant technical challenges in its implementation. The main requirements are that the software is tested by an organization's IT department to ensure that it is compatible with other software commonly used on the desktop within the organization. It is also ideal if each computer is connected to a common network, this enables customization information for each user to be stored on the network so that management can view and control the system.

Ken Hayes, Ergosaver: The greatest technical challenge is whether the client's IT department sees a software solution as yet another burden or as a vehicle for preventing future problems.

In Ergosaver's experience, IT departments in large corporations are often reluctant to install software on their users' computers—particularly break reminders. Many of these companies prefer our web-based solution as less intrusive and easier to support and upgrade.

Steven Rudnik, Magnitude

Information Systems: IT is tasked with both protecting and maintaining the corporate computer infrastructure and meeting the business needs of the company. IT needs to be assured, through testing and validation, that the software is compatible with their infrastructure, and that operation and maintenance of the software is both economical and straightforward. Through pilot programs, lab QA and limited production rollouts, our clients have assured themselves of the compatibility, interoperability and lack of business disruption, showing the technical viability of our software.

We have also found that the differing tasks of the corporate environment can have a profound effect on how the software is implemented. Through a process of learning and understanding the nature of the business of our clients and closely working with both IT and management, Magnitude and our clients have successfully formulated software implementation plans to meet our diversified client base. From roaming users, thin clients, high government security sites, clients working from home or personnel in the field, our experienced team approach has allowed us to successfully meet any technical challenge over the years.

ESM: To what extent is technology/software truly effective at reducing injury rates...and worker's compensation costs?

Kim Lopez, Remedy Interactive:

We've had some great success in this area: our clients have experienced a 76% to 87% reduction in average cost per claims and lost workdays.

Ron Goodman, RSIGuard:

Unfortunately, there has been little

research in this area, however a NIOSH study and a Cornell study both found value in break taking. Anecdotally, we have thousands of users who tell us how much the software has helped them individually and many ergonomics departments that are de facto RSIGuard product evangelists.

Kevin Taylor, WorkPace: Several studies have shown that breaks and exercise software has a positive effect in reducing pain complaints.

A research paper published in 2001 in the American Journal of Industrial Hygiene conducted an ergonomic study of 118 employees using WorkPace. It found "the number of users in nearly every category of discomfort was decreased after WorkPace was installed". Training and customized WorkPace profiles were provided.

In 2001, supported by ZorgOderzoek, TNO, the Dutch Organization for Applied Scientific Research, conducted a research study on the effectiveness of breaks. The study did not provide training on individually customized settings, but used a simplified breaks and exercise, or breaks only regime. Despite this, some improvements in symptoms were found, and satisfaction levels were high. Productivity improvements were also found and typing accuracy and total key-strokes per day increased.

Ken Hayes, Ergosaver: Short run responses are usually qualitative. We might hear "Now I finally understand how to adjust my screen to prevent these neck aches". Our clients' Health and Safety Reps often tell us that they can identify higher-risk users earlier on, and can thereby proactively help keep unrecognized discomforts from turning into Workers Comp claims.

The long-term impact of our system on disorders has been more difficult to track because of the multi-pronged issues that

contribute to long term disorders.

Ergosaver's European Board of Advisors continually re-evaluate research initiatives that might use non-personal data without violating proprietary information and individuals' rights to privacy; we are clearly pushing for more research in the area. We believe such research needs to be along the lines of the pharmaceutical industry (e.g. clinical drug trials), which can take years.

Steve Rudnik, Magnitude Information Systems:

Technology/Software cannot in itself provide a 100% solution, Magnitude's experience has shown that a combination of work pacing, identification of natural posture, communication and education is the most effective means for reducing costs associated with RSI injuries. As one of our clients has demonstrated, the ability to measure and react to high-risk individuals or groups, provide ergonomic education and communicate ergonomic issues on a pro-active basis has led to a corporate cultural change.

Fortune 500 companies and government agents have experienced a 60% - 90% reduction in injury rates after implementing our patented award winning ergonomic software—ErgoEnterprise.

The worker' compensation costs to our clients depends on if they are self insured or insured through an insurance company. Insurance companies are starting to reduce premiums to clients who incorporate preventative RSI programs, such as our patented ergonomic software.

ESM: Can you offer one example of results one of your clients has experienced?

Kim Lopez, Remedy Interactive: In a recent case study with a sub-population of one of our clients involving over 2,000 employees who participated in an RSI Prevention Program which included the

Remedy Interactive Ergonomic Program Management Platform, they found:

- 1) An 84% decrease in the average cost/claim
- 2) An 87% decrease in the average number of lost workdays
- 3) And a 76% decrease in the number of claims involving lost workdays.

The review of the data also showed that all employees that submitted workers' compensation claims in this population had been identified as high risk by our Platform.

Ron Goodman, RSIGuard: One small CAD company told us that they were at risk of losing their 2 best employees and this was a serious risk to their company. The problem they had was that the employees had been forced to work long hours using a mouse and that they had tried numerous solutions (e.g. alternative pointing devices, hand switching) and they hadn't had any long term success. RSIGuard has a unique feature called AutoClick that significantly reduces the strain of using any pointing device. Over 2 years later, both of those employees are still successfully working full-time. Although their injuries are chronic, RSIGuard's AutoClick has allowed them to stay productive and help keep their company healthy as well.

Kevin Taylor, WorkPace: Similarly, in 2000-2001, 25 pilot studies were conducted in various organizations the Netherlands. A total of 1,450 computer users took part in the 10-week studies. Participants were provided with training and the WorkPace Setup Wizard was used to customize settings to each user's specific needs.

Collated results revealed a high level of user satisfaction with WorkPace and a significant reduction in user discomfort complaints (among others 30-35% less eyestrain).

In questionnaires completed after the

study 69% of users said they wanted to continue using the software, and 89% said they would recommend it to people with pain complaints.

Ken Hayes, Ergosaver: In an engineering-focused multi-national company, we saw Knowledge levels rise 21%, Attitude levels rise 9% and Fitness/comfort levels improve 9% in about one month. The company then identified the 13% of users with the most serious risk/discomfort levels, who could then be followed up individually.

Steve Rudnik, Magnitude Information Systems: State Fund Insurance of California initiated a pilot program from Jan 1–June 30, 2000 in

four State Fund locations.

The four offices filed a total of fifteen claims for the six-month period that the test was conducted. Of those only 6 were RSI's. In the corresponding six months of the previous year, twenty-two claims were received and 12 were RSI's. The six months OSHA rates dropped a minimum of 20% and as much as 80%.

Using standard SCIF estimates of \$20,000 for disability claims, the State Fund realized a savings of \$120,000 while using Magnitude's ergonomic software. To project this for the entire State Fund using an anticipated injury rate reduction of 20% (The average injury rate reduction for the pilot was 50%), the savings would be \$380,000 for just the first six months.

Learn more: www.remedyinteractive.com; www.rsiguard.com; www.ergosaver.com; www.workpace.com; and www.magnitude.com

Next issue: Our CEOs continue the discussion and share micro-case studies and "real world" examples of some of the benefits specific organizations have experienced.

Special thanks to Doug Mealy for arranging this ErgoForum. Contact Doug at 518.253.4459 and through www.om-pr.com.

Feedback, Comments?

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