Special Report: Why Ergonomics Software Solutions?

By Doug Mealy

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 the first of a 2 part series, CEOs from four of the top ergonomic software providers discuss some of the major issues and questions companies face when determining if they should make such an investment in their employees' welfare. Joining *ESM* in this discussion are: Kim Lopez at Remedy Interactive (www.remedyinteractive.com); Ron Goodman at RSIGuard (www.rsiguard.com); Kevin Taylor at WorkPace (www.WorkPace.com); and Ken Hayes at Ergosaver (www.ergosaver.com).

ErgoSolutions Magazine: Why should companies consider implementing an office-based ergonomics program using computer-based or web-based tools?

Kim Lopez, CEO, Remedy Interactive: Discomfort and injuries are costly to all organizations. As more and more people spend more and more time at computers, the number of repetitive stress injuries (RSIs) increases. The cost to companies comes in many forms, from workers' compensation claims to decreased productivity and absenteeism. Historically, companies have been unable to proactively manage their ergonomics programs. Technology now offers a cost-effective way to manage office ergonomics programs proactively, to prevent injuries rather than to react, often after the injury has occurred. The two more common types of technologies used to reduce office-based injuries are "assessment-training-management" tools and "break software." Each can be used in different ways to reduce injuries.

Ron Goodman, RSIGuard Project Director: Two primary goals of any office ergonomics program should be to:

1. Increase understanding of how people are using their computers and how their work patterns are leading to risk and injuries, and
2. Help users to change those risky work patterns.

Ergonomics staff will never have the resources to provide the level of observation and feedback that software can provide to help identify and rectify risky work patterns. Although a human eye is necessary for some types of observation and feedback, software can do an excellent job in some key areas, and can do so for an insignificant investment.

Kim Lopez, CEO, Remedy Interactive

Kevin Taylor, CEO, WorkPace: Software ergonomics tools are a cost-effective way to address the risk factors often overlooked by more expensive interventions. Traditionally, an employees' workload, their perceived risk of developing problems, and whether they take sufficient breaks from the computer, have not been a focus. However, a growing body of evidence suggests they are just as important, if not more so, than physical ergonomics.

Ken Hayes, President, Ergosaver: Compared to traditional forms of ergonomics training such as one-on-one evaluations or group sessions, web-based training offers faster implementation, scalability to a large organization and value in terms of reduced travel time and personnel time.

Web-based tools also enable convenient on-line tracking of completion, accountability and follow-up. They enable managers to take proactive initiatives in preventing injuries. This is critical to today's cost-conscious organizations.

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ESM: Is there any company for whom this type of solution might not be good?

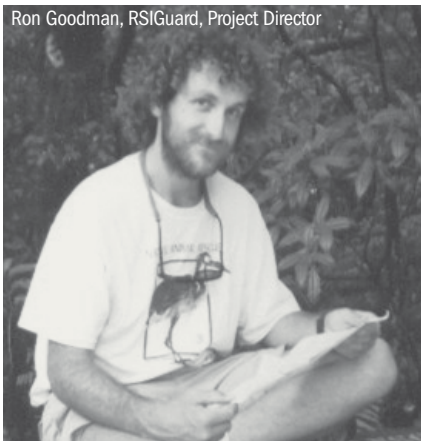
Kim Lopez, Remedy Interactive: The benefits of leveraging technology for an office-based ergonomics program grow exponentially as the size of the company grows.

Several factors will determine whether technology should be used and which type of technology will add the most value. These include:

- The extent to which the workforce is widely distributed across geographic boundaries
- The size of the computer-using workforce
- The heterogeneity vs. homogeneity of the work environment
- The extent to which the ergonomic health of the employee population can be managed proactively by one-two staff
- And, of course, access to the Internet.

Ron Goodman, RSIGuard: If a company has people who spend a significant portion of their time on the computer, then these computer-based software tools can offer help.

Some environments, like Call Centers, have specific needs—e.g. operators not being distracted during a phone call by a break suggestion. Some tools have specific versions for special environments (e.g., RSIGuard Call Center Edition) that address the needs of special environments, and many computer-based software packages have the flexibility to disable certain features if they aren't appropriate to a certain environment.


Ron Goodman, RSIGuard, Project Director

Kevin Taylor, WorkPace: Software ergonomics solutions are appropriate for any company with people using computers. In many companies these days, no matter what their industry, there will be a large number of staff who spend a significant proportion of their day using a computer. Software-based ergonomics tools can be very effective for these people.

Ken Hayes, Ergosaver: Nearly all organizations, even with just a few PC users, can benefit from web-based training. Nevertheless, web-based training is

not as useful for employees who do not use the PC extensively (e.g., for manual materials handling and some service workers). Such employees are better served by personalized training.

ESM: What are the benefits of an office-based ergonomics program using computer-based or web-based tools (vs. in-person attention) to reduce office-based RSIs?

Kim Lopez, Remedy Interactive: Depending on the technology chosen, use of a web-based tool for an office ergonomics program is likely to offer the following benefits:

- Increased knowledge and control: Obtain the ability to identify problem areas and the reasons for those problems
- More efficient use of resources: Know where your problem areas are so that you can focus your resources on those problem areas, preventing problems before they occur
- Quantified value of your efforts: Many web-based tools provide data and reports that give you the ability to measure and quantify the results of your efforts
- Consistency of message: You gain the ability to reach your entire employee population with consistent messages, across states, across continents, around the globe.

Ron Goodman, RSIGuard: There is no way to replace in-person attention. But due to resource limitations, in-person ergonomics has necessarily been limited to addressing issues that can be fixed quickly and simply. While in-person visits are necessary for things like adjusting workstations, they are limited in their ability to affect behavioral patterns, which require constant repetition of an observation/feedback cycle.

Reducing office-based RSIs requires behavioral pattern change and that is where computer-based tools thrive. Software tools can be active at all times, observing users, helping users to change, collecting information about how people are working and changing, and helping ergonomics staff focus their efforts on users identified by software as high-risk. Simply, software can provide unlimited hours of attention to a client's needs and thereby help them to reduce their exposure to risk.

Kevin Taylor, WorkPace: Firstly, computer-based software tools are much more cost-effective than staff doing one-on-one direct assessment. Secondly, software enables round-the-clock care of employees, including those working remotely, and round-the-clock objective monitoring of risks. Care can also be individually customized to the specific needs of each employee. For example, an employee undergoing injury rehabilitation can have a specially configured breaks and exercise regime to assist recovery while preventing further injury. Likewise, employees deemed at higher risk such as those with previous problems, those using CAD or undertaking data entry for example, can have stricter settings.

Kevin Taylor, CEO, WorkPace

Ken Hayes, Ergosaver: For the record, we'd rather avoid the expression "RSIs" because of its focus on repetition. Repetition is only one risk factor—and probably not the most important. Constrained and awkward postures are more hazardous, in our view. We'd also rather focus on MSDs because many discomforts don't fit neatly under the RSI umbrella. We believe companies need to focus on the total health and productivity of their employees, no matter how the specific risks arise.

Our web-based training offers:

- Convenience, because training is available 24/7.
- Individuality, since training content is specific to the company and user's situation.
- Time-efficiency, since the questions asked and advice given are based on a user's prior responses.

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- Prioritization and the "big picture" of both the user's and company's risk situation.

Group training and a classroom environment is typically unable to provide such benefits.

NEXT ISSUE: IN PART 2 OF THIS ERGOFORUM, *ESM* September 2003, the CEOs share micro-case studies and "real world" examples of some of the benefits specific organizations have experienced.

Ken Hayes, President, Ergosaver

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

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