

How tech tools improve workplace ergonomics.

REDUCE PAIN AND STRAIN TO BE MORE PRODUCTIVE.

Ergonomics isn't just about adjusting our workspaces to be more comfortable. Today, it's about the way technology can help us work with less pain, says Thomas J. Armstrong, Ph.D., a professor of industrial and operations engineering at the University of Michigan, where he researches and teaches for the Center for Ergonomics.

"There are a lot of opportunities for technology to make us feel better," Armstrong says.

And thank goodness, because the workplace is rife with opportunities for discomfort, which saps motivation and hampers productivity.

HOW TODAY'S WORKPLACE AFFECTS THE BODY

Ergonomics is the study of how human workers interact with their environment, and it encompasses both physical and psychological elements. Changes in the business landscape, such as the aging of our workforce, necessitate evolution in how workers use equipment and perform daily tasks.

Much of the pain related to work is due to repetitive tasks, in addition to the sheer amount of time we spend working, Armstrong says — both in hours per week and years in a lifetime. And in our productivity-focused culture, there isn't often an emphasis on rest and recovery.

What's more, Armstrong says, is that workplaces are typically designed as one-size-fits-all, when in reality, "we're dealing with a very diverse population in terms of abilities and capacities."

Chronic pain that develops gradually takes a toll, both on a worker's well-being and on the productivity of business; half of working Americans deal with back pain every year, according to the American Chiropractic Association, and a survey from the Centers for Disease Control and Prevention found that 15 percent of employed adults had pain most days or every day.

HOW TECHNOLOGY HELPS REDUCE WORK-RELATED PAIN

Fortunately, technology can play a major role in relieving pain at work, both because it's changed the realities of how we work and because it's made many tasks less cumbersome or repetitive.

First, the rise in mobile technology means that more people work on the go, rather than in a designated space every day. This is promising because being on the go means more movement and less sedentary behavior, Armstrong says.

Mobile workers might have more flexibility with how they want to work, whether it's sitting or standing or walking. They also can take more breaks, which is

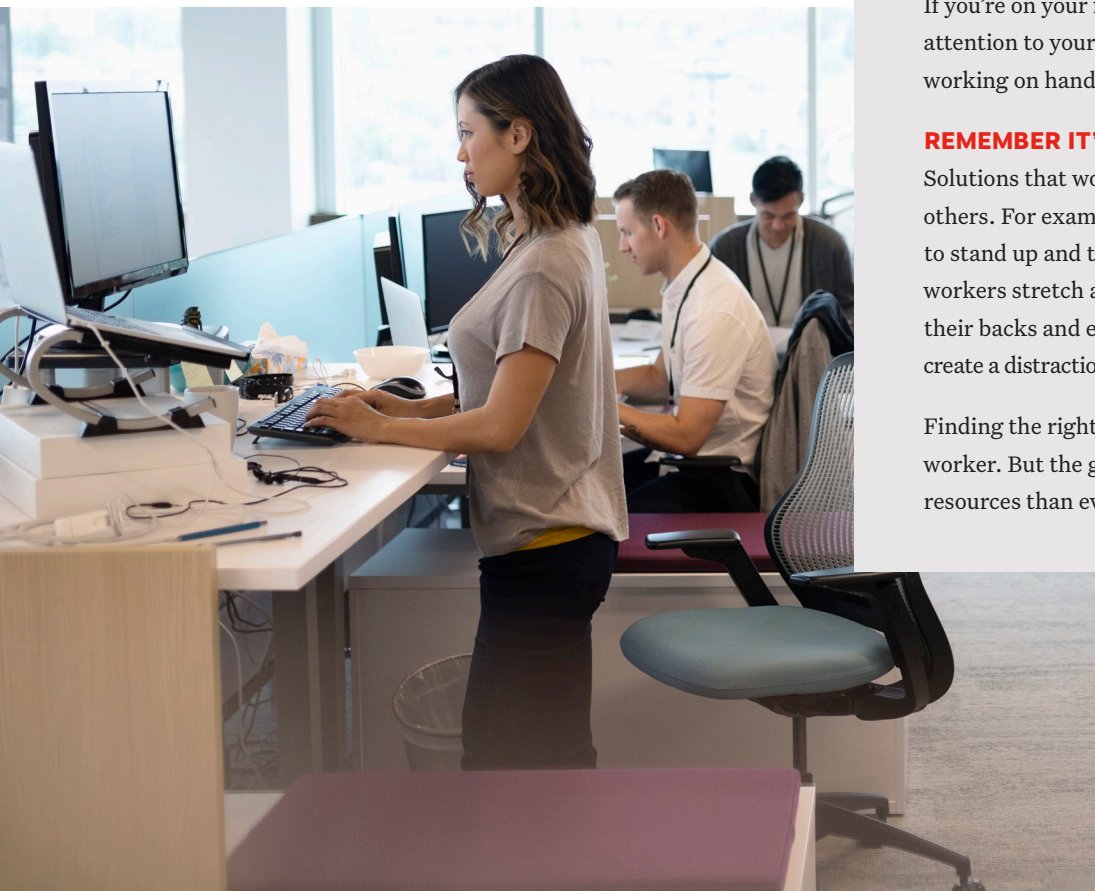
good for mental and physical health. (The downside to all this mobility? A lack of access to quality equipment that we have in the office.)

Technology also makes a lot of the tasks we do over and over easier, and it might eliminate the need to do those tasks altogether.

“I think technology is changing the tasks that people do and the physical interaction people have with equipment to accomplish their jobs,” Armstrong says.

For example, software can create annual reports and other documents that used to require many human hours for research and typing. Tablets allow managers to walk the floor of their offices or warehouses with information at their fingertips so they’re not chained to a desk. Scanners can help people loading boxes know what’s inside so they don’t have to maneuver the package manually. And electronic records mean you don’t have to haul boxes out of a storage room and spend hours searching for what you need.

For people who can put technology to work for them to ease pain, it can make the many hours spent working more comfortable and productive — good for bodies and businesses.



ASSESSING YOUR UNIQUE ERGONOMIC NEEDS

Solutions for a more comfortable workplace aren’t universal — everyone must identify his or her own needs to find the best way to work.

“You could buy the best keyboard in the world, but if you don’t set it up properly or if you use it long enough or hard enough, you’re going to have problems,” says Thomas J. Armstrong, Ph.D., of the University of Michigan Center for Ergonomics.

Here’s how to assess your ergonomic needs:

ANALYZE YOUR DAY.

Keep a list during a typical workday of all the tasks you do and the equipment you use. What position are you in the most?

IDENTIFY WHAT CAN CHANGE.

Look at each task and piece of equipment and ask: Is this comfortable? Can I change the equipment or my position if the task changes or if I start to feel strain?

REVIEW YOUR EQUIPMENT.

If you type all day and have pain in your wrists, you’ll want to research supportive keyboards. If you’re on your feet and your back hurts, pay attention to your shoes and your posture when working on hand-held devices.

REMEMBER IT’S NOT ONE-SIZE-FITS-ALL.

Solutions that work for some won’t work for others. For example, apps that remind people to stand up and take a break might help some workers stretch and keep them from straining their backs and eyes. For other people, it might create a distraction just as they’re getting into a flow.

Finding the right way to work is as unique as each worker. But the good news is that there are more resources than ever to help you feel better.