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# THE 'Productivity Paradox' and ergonomic office chairs

By Terry Cassaday

Productivity may be easy to define but is notoriously difficult to measure.

For instance, most people take for granted that personal computer systems have significantly improved office productivity over the past two decades, yet it has been said that computers are showing up everywhere except in productivity statistics. This phenomenon has been called the Productivity Paradox.

Studies to determine the correlation between information technology spending and labour productivity were first conducted in the 1980s but could not show a direct relationship between information technology investments and labour productivity.

Among the lessons learned from the various studies conducted over the years are that information technology purchases made in isolation and not coordinated with other managerial innovations and adequate employee training will most likely not result in any measurable labour productivity gain.

We think an analogy exists between the early days of widespread computer usage and the introduction of ergonomic seating into office environments, as office seating faces some of the same issues as did computers. That is, it is difficult to measure the productivity improvement from the purchase of office seating and that ergonomic office seating cannot be expected to provide a positive return on investment (ROI) if it is not combined with adequate training and other managerial changes.

One significant difference between the purchasing behaviour of organizations looking to buy new information technology versus those considering the acquisition of new office chairs is that with IT, organizations understand very well that their decision will have significant ramifications and, so, will invariably conduct a detailed analysis of all the solutions being considered before any final decision is made. If an IT expert is not available within the organization to manage the decision-making process, outside expertise will be acquired.

With office chair purchases, on the other hand, very little purchase analysis is ever conducted and almost never with the input of an ergonomics expert. The truth is most office chair purchase decisions are based on lowest price or aesthetics, neither of which makes sense for a purchase that has such a large potential impact on the health and productivity of the workforce.

One reason many chairs are still purchased on the basis of price or aesthetics is that many purchasers still believe that a chair is a chair, and they appear to be unaware or unconcerned that there are widely accepted principles governing how a chair must be made in order to reduce the stresses caused by the seated posture. Yet it is only by reducing these stresses that an increase in productivity and reduction in health costs can be achieved.

There have been many industry and academic studies conducted that show that improvements to workstations and seating can improve worker health and productivity and the experts agree.

"We're built to move, so a chair has to be adjusted to offer proper support to allow for that to happen while we're seated and doing our job," says Natalie Carscadden, President of the Association of Canadian Ergonomists (ACE). "For business, it's worth spending the money to buy a proper chair because you can be assured that whoever is using it is comfortable, which will lead to increased productivity on their part."

To anyone that is skeptical that buying a better chair is worth the investment the following quick cost benefit analysis shows how low the hurdle is to achieve a positive ROI. Simply calculate what a proper chair costs per day of use when amortized over 5 years. You will find that the result is less than most employees cost you per minute. So the employee only has to work one more minute per day to justify the cost of the chair.

If you do decide that a proper chair is worth investing in here is the process we recommend you follow:

- 1 Using expert advice, choose a short list of chairs with the required features, warranty and quality and then trial the chairs with your employees to get their feedback and buy-in.
- 2 When doing any cost benefit analysis comparing one office chair to another you should look at *total cost of ownership* not just the one time purchase price. The total cost of ownership not only takes into account health and productivity issues but also the cost of repairs and the transaction costs involved in arranging repairs. Each time a low cost chair needs to be repaired, its cost goes up, and by a lot more than most people realize.
- 3 Once you have chosen the chair, don't buy the exact same model for everyone. The workforce of today is more diverse than ever, so there is

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simply no way one chair design can fit everyone. The cost savings of purchasing the same chair for everyone is very small compared to the cost of years of lost productivity and increases to healthcare and absenteeism. This does not mean you have to buy a different chair for each person. You can find a chair that fits most people but at least a few will need some variation to be properly fit.

**4** Any ergonomic office chair purchase must include proper user training. Most office workers do not know how to adjust their chair. Training on how to use all of the necessary adjustments and why is an important step in ensuring you get a positive return on your investment.

**5** Retrain every employee once a year on how to adjust their chair and remind them why they should. At the same time, you can determine if anyone is sitting in a chair that is inadequate for his/her needs so you can do something about it before it's too late. To maximize your ROI you have to move from a reactive to a proactive approach.

The more you know about the effects office seating can have on the health and productivity of your workforce the more you may conclude, as we do, that improper seating not only increases health care costs and absenteeism but has been partly to blame for the information technology Productivity Paradox. 

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*Terry Cassaday is president and CEO of ergoCentric Seating Systems in Mississauga, Ont. He can be reached at 905-712-8826, or by e-mail at [terryc@ergocentric.com](mailto:terryc@ergocentric.com). To download a free 17-minute video entitled "The Anatomy and Biochemistry of the Human Body in the Seated Posture", please visit [www.ergocentric.com/freevideo/index.html](http://www.ergocentric.com/freevideo/index.html).*