

Ergonomics Case Study Seattle Mariners Ticket Sellers

Background

When the Seattle Mariners moved from the Kingdome to what was then a brand new Safeco Field, some of their old equipment, computers, and furniture made the move with them. Unfortunately, this led to some discomfort among the employees as the old equipment was set up in a new environment. Mariners' management was considering making changes in order to proactively address these issues before injury occurred, but they wanted to make sure that the changes would address all of the employees' concerns. To get an outside opinion, they invited an ergonomist from Labor and Industries (L&I) to assess the situation and interview the ticket sellers.

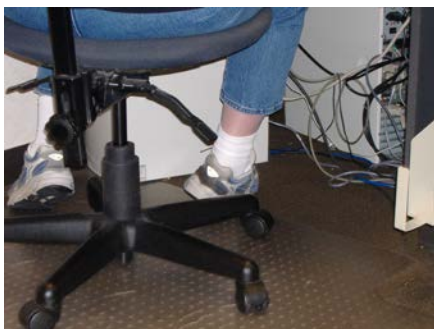
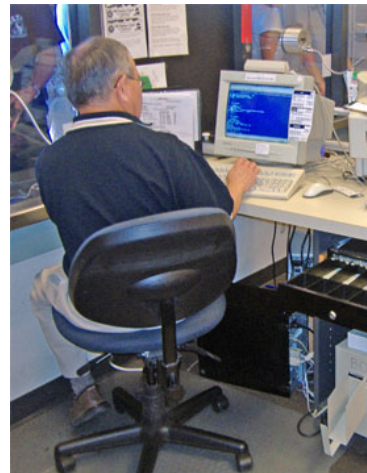
Issues Found

During the interviews, the ticket sellers all identified the same two issues as the primary causes of their concerns with the workstation set up - the location of the computers and the location of the ticket printers.

Employees were twisting to use the computers, which were at a 90-degree angle to the ticket windows.

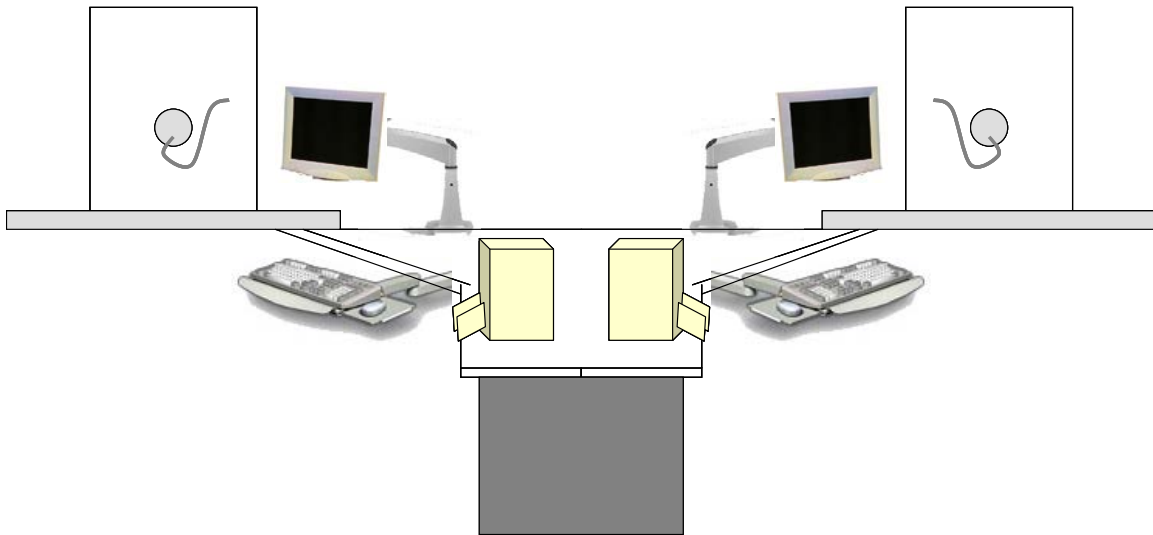
Shorter employees had to raise their chairs to the point where their feet didn't touch the floor.

The only available space for the ticket printers was on a low shelf. Employees had to bend and twist every time they printed out tickets for a customer.



Recommendations

Based on the ticket sellers' input, the L&I ergonomist recommended a switch to flat panel LCD monitors, along with height adjustable monitor arms and keyboard platforms. The small size and light weight of the flat panel monitors would allow for more placement options, so that they could be located closer to the ticket windows. With both the monitors and keyboards on height-adjustable arms, each ticket seller could raise or lower them to fit. This diagram shows the proposed ticket window set-up:



With the keyboards and monitors off of the shared worksurface between the ticket windows, the printers could come up from the low shelf and sit on top of the worksurface, where the printed tickets would come out at a convenient height.

Implementation

Mariners' management chose a simple installation option, with the keyboard platforms mounted directly under the ticket window counter, and the monitor arms mounted just to the sides of the windows. New adjustable chairs also helped staff to sit more comfortably. The photo to the right shows the new layout, with the ticket printers located close at hand.



Follow-up

After the ticket sellers had several months to get used to the new set-up, the L&I ergonomist visited to review the changes and observe working postures. The bending, twisting and reaching motions that were so common in the old set-up were no longer present. Thanks to the proactive efforts of the Mariners' management, the ticket sellers are now able to focus on their interactions with customers while working in safe and comfortable postures. Management reports that there have been no more employee comments or complaints since the change.

