

Tuesday, October 25, 2016

Does the RollerMouse Measurably Improve Productivity in Account Processors?

A Corporate Case study

Introduction:

As part of a year-long effort to collect data on processes that affect overall production, an internal study was recently performed within the account processing department of a major business services company, investigated the effect of using the RollerMouse on the daily production rate of account processors. A total of twenty-four active account processors served as the subject group. Subjects were provided the same skilling for the prior 30 days, and contained different skill sets.

Methodology:

Subjects involved in the study were tested in two different conditions. Table 1 outlines the different experimental protocols. In one condition, investigators established a benchmark for how much time is wasted on extraneous movements, without the assistance of a RollerMouse. Subjects were tested on time lost (TL) using a standard mouse, where roughly half the subject group (n=10) was monitored over a full shift for two weeks. The other condition evaluated production rate (PR) in all subjects (n=24) using a RollerMouse, and measured over a 30-day period. Production rate was operationally defined as the total number of claims processed per hour (CPH). Time lost was defined as the aggregate amount of time spent reaching for a mouse, performing a click action, and returning back to the keyboard (TLH), measured over a full 8-hour shift.

Table 1.

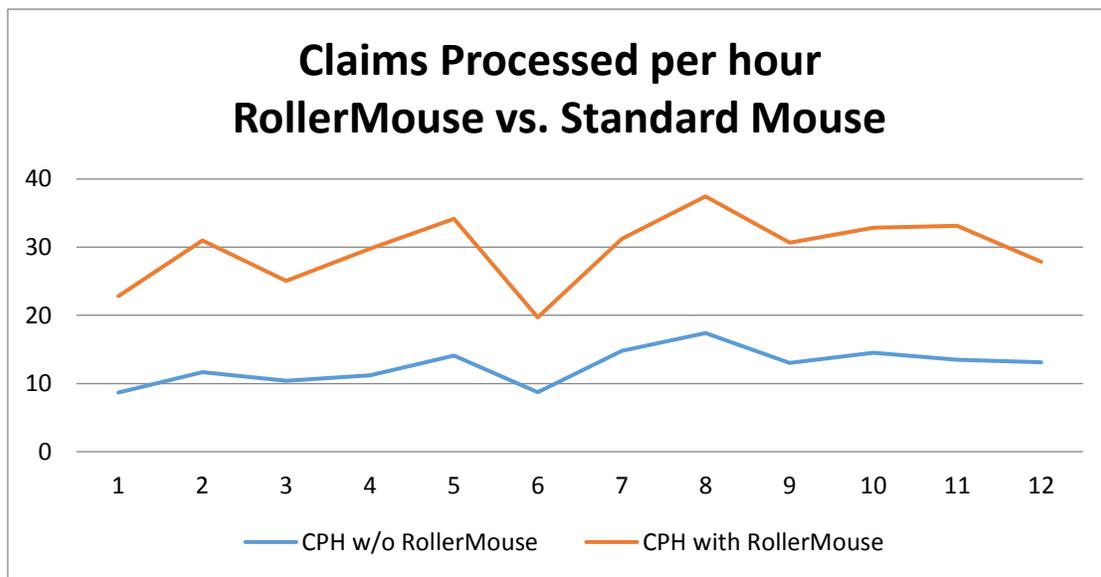
	Subjects (n=)	Time tested (days)	Key Variable (per hour)
Condition 1 - Time Lost (TL)	10	14	Time lost/Hr (TLH)
Condition 2 - Production Rate (PR)	24	30	Claims/Hr (CPH)

Results:

The collective action of moving the hand from keyboard position to mouse position, performing the desired mouse click(s), and returning to original position, proved to be quite costly. Subjects in (TL) averaged approximately 7.5 minutes/hour of lost time during this transition. This equated to roughly **one hour of lost time per 8 hour shift using a standard hand-held mouse.**

Subjects in (PR) revealed a substantial improvement in CPH using the RollerMouse compared to using a standard mouse, **averaging a 19% increase in CPH during RollerMouse use.**

Figure 1: Results graph of data collected during the production rate (PR) condition on employees performing claims processing over a 30-day period



Conclusion:

Investigators determined that **subjects using the RollerMouse were considerably more productive in processing their respective work,** and this attributed to the following:

- Subjects were spending less time processing CPH using a RollerMouse compared to a standard mouse, due to:
 1. The central position of the RollerMouse in front of the keyboard, and
 2. Easy access to click action of the rollerbar.
- Subjects adapted to keyboard hotkey use most quickly using the RollerMouse by way of the mouse device positioned so close to the keyboard