

Plantronics  
**Headsets Increase**  
Knowledge Worker  
**Productivity 23.5%**

A Plantronics  
**White Paper**  
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# Increasing Your Bottom Line by Increasing Productivity

## Introduction

Productivity—what does it mean? Profit. Productivity means profit. When an employee can complete more work in a normal workday, revenue increases while costs remain the same. The extra revenue generated by increased productivity goes straight to your bottom line.

Because increased productivity means additional profit, well-managed companies are always looking for ways to improve employees' speed and efficiency. In fact, in its 2003 poll on the ideas and issues that most interest America's top managers, Accenture's Institute for Strategic Change, located in Cambridge, Massachusetts, found that top managers consider "improving knowledge worker productivity" to be the most critical issue of the year.<sup>1</sup>

But increasing productivity isn't easy. It usually requires a substantial initial investment of time and money, and the payback can be slow. In their efforts to increase productivity, Fortune 500 companies spend untold numbers of dollars each year to identify best practices within their organizations and to transfer the knowledge required to implement those practices in other parts of the organization.

Wouldn't you like an easy, cost-effective means of quickly increasing productivity? We know you would—and we have one for you, if your employees spend any significant time on the telephone. For employees who spend 10 percent or more of their time on the telephone, using a Plantronics headset is a quick, cost-effective way to increase productivity.

Of course, we know that before you allocate budget for new equipment, you need to be reasonably certain that the expense will actually increase productivity and profit. In these cost-conscious times, it might not be enough that other companies that have implemented the use of telephone headsets have universally reported increased productivity and profits. Even when it's consistent, anecdotal evidence is suspect.

That is why Plantronics recently commissioned an independent, carefully controlled study inside a real-world business. The study measured, objectively and quantitatively, how using Plantronics headsets affects user productivity.

The study results show clearly that, in a real-world business environment, using Plantronics headsets can significantly increase productivity.

<sup>1</sup> H. James Wilson, "Speeding the Plow: A way to boost knowledge worker productivity could be the new blockbuster." *Trends and Ideas*, a Harvard Business School Publishing Newsletter, Fall 2003.

## The Study

An independent ergonomics-consulting firm, E3 Consulting Corporation, conducted the study. Designed as a controlled field test, the study was conducted within the routine work boundaries of a real-world business, Irwin Mortgage Corporation, in Phoenix and Scottsdale, Arizona. Irwin Mortgage is a national company with 3,500 employees and 150 offices nationwide. The company services more than ten billion dollars worth of residential loans per year.

The study was designed specifically to examine how the use of a Plantronics headset affected an employee's actual productivity. All participants worked as loan processors.

E3 Consulting did not reveal the productivity element of the study to the participants. In fact, to minimize the possibility that the participants would realize that productivity data was being gathered, and thus avoid the possibility of bias skewing the results, the productivity study was conducted within a larger ergonomic study.

E3 Consulting conducted an online pre-evaluation, and participants were selected from a pool of employees who spent at least 10 percent of their workday using the telephone. In the pre-evaluation, participants were asked to indicate whether or not they had neck, upper back, or shoulder discomfort during their normal workday and, if so, to rate the severity of the discomfort. These questions led the participants to focus on the fact that they were participating in a study about ergonomics.

Participants were divided into an experimental group and a control group. Participants were not allowed to choose whether they would use a headset. The selection of members of the experimental group and the control group was completely random.

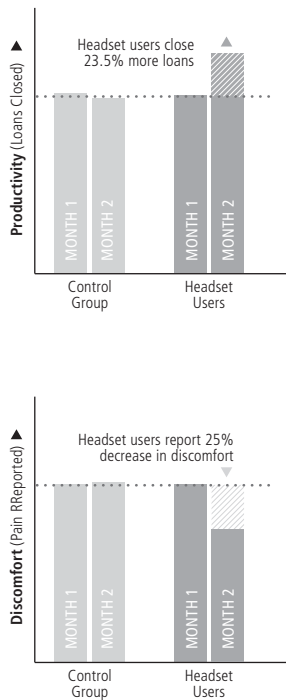
Out of a selected pool of 62 Irwin Mortgage employees, 34 were provided a headset. These employees became the experimental group. The other 28 members of the subject pool were used as a control group.

The members of the experimental group were not subjected to any experimental factors other than being given headsets and being told that they were using the headsets within an ergonomic evaluation. The members of the control group were not subjected to any experimental factors.

Plantronics representatives were on-site only to ensure that the Irwin Mortgage employees understood how to use their headsets and that they were satisfied with them. Irwin Mortgage employees were allowed to try different headset styles. This served to reinforce the participants' focus on ergonomic issues.

E3 Consulting benchmarked the average productivity of each experimental and control group member prior to the start of the study. The benchmarking was based on Irwin Mortgage data that showed the total number of loans processed per month by each employee, prior to the time that headset use began.

E3 Consulting tracked headset use, productivity changes, and user discomfort over a 30, 60, and 90-day period. E3 Consulting then conducted a Web-based, follow-up evaluation.



**Figure 1: When given Plantronics Headsets, the number of loans closed increased 23.5% while complaints of discomfort decreased by 25%.**

## The Results

After analyzing and evaluating the data collected over the test period, E3 Consulting found that there was a statistically significant productivity increase for the employees who used Plantronics headsets. In fact, the increase was dramatic.

Loan closing data for the study period was gathered using Irwin Mortgage's internal reporting methods. E3 Consulting then compared this data against the number of loans closed the prior month. For the experimental group (the 34 study participants who used Plantronics headsets), the number of loans closed increased by an average of 23.5 percent. The number of loans processed by each member in the experimental group either increased or remained the same.

Furthermore, when asked for a subjective evaluation of their individual productivity, participants in the experimental group said they felt their productivity increased an average of 22 percent, based on their use of the Plantronics headsets.

In addition, headset users who had reported neck, upper back, or shoulder discomfort during the pre-evaluation reported an average 25-percent decrease in discomfort. Sixty-seven percent of members in the experimental group reported at least some decrease in the severity of neck, back, and shoulder discomfort.

The control group did not experience a statistically significant increase or decrease in discomfort. All members of the control group reported either that their discomfort stayed the same or that it increased 10 percent. (The Discomfort Rating was based on a 1-10 scale, with a rating of 1 for the least amount of discomfort.)

## Conclusion

This study was a scientifically controlled field test. It was conducted in a real-world company, with real people who were performing their everyday jobs.

The results are clear. Using Plantronics headsets significantly increased the productivity of the Irwin Mortgage loan processors and, as a bonus, frequently reduced the severity of their neck, back, and shoulder discomfort.

Kevin J. Theodora, Irwin Mortgage Corporation's Carson Branch Manager, explained the importance of the results for his company: "Increasing productivity without increasing costs is critical in today's marketplace. By integrating Plantronics headsets into our work environment, not only did we increase employee productivity by almost 25 percent, we also decreased employee discomfort complaints by over half."

It's not easy to increase productivity and profit. But if your employees spend any significant amount of time on the telephone, Plantronics headsets are an excellent way to increase productivity in your company—and that increased productivity means a corresponding increase in your bottom line.

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**Footnote:**

*Knowledge Networks, a marketing research company headquartered in Menlo Park, CA, audited the statistical validity of the completed study, and submitted the following audit summary:*

The Plantronics Ergonomic Headset and Productivity Study was set up as a controlled field test to examine the impact a Plantronics headset has on a user's productivity and discomfort level. Two samples were randomly selected from the pool of eligible employees who reported having neck, upper back, or shoulder discomfort and who spent 10 percent or more of their workday using the telephone. One of the random samples was designated as the experimental group, and the other became the control group. Members of the experimental group were given a Plantronics headset to use for their loan-processing work. No experimental factors were introduced to members of the control group.

Preliminary results from the first 90 days of the experiment show that the use of Plantronics headsets significantly improved productivity in the experimental group. There was a 23.5-percent increase in the number of loans processed over the previous month by members in the experimental group [ $\pm$  9.4 percent, calculated at the 90-percent confidence level]. In fact, the number of loans processed by every member in the experimental group either increased or stayed the same. There were no decreases in production for the experimental group.

In addition, the rating measure for severity of discomfort dropped or stayed the same for every member in the experimental group. Sixty-seven percent [ $\pm$  10 percent] of members in the experimental group reported a drop in the severity of their neck, back, and shoulder discomfort. In the control group, there was not a statistically significant increase or decrease in the severity ratings.

Preliminary field test results support the conclusion that the Plantronics headset increases productivity in processing loans and reduces the severity of neck, back, and shoulder discomfort.