

EFFICIENT OFFICE COMPUTING

**The Importance of Software Training:
Save Money While Improving Workplace Morale**

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Efficient Office Computing**

Businesses spend millions of dollars on software to help employees work efficiently. Unfortunately, millions of dollars are also lost in payroll expenses when employees encounter software problems due to lack of education or less-than-intuitive software interfaces.

By attending to their technology usage, businesses can not only recuperate a large percentage of lost payroll wages but also improve employee confidence and reduce computer-based stress in the workplace.

The Costs of Software Problems

At What Price?

Frustrating experiences waste an average of 42-43% of the time employees spend at their computers, according to the *User Frustration with Technology in the Workplace* study co-sponsored by Carnegie Mellon University, Towson University, and the University of Maryland. This calculation includes time lost trying to solve the problem and time spent recovering any lost work.

The Employment Situation: June 2009 report, dated July 2, 2009, issued by the United States Department of Labor, Bureau of Labor Statistics, states the average earnings of "production and nonsupervisory workers on private nonfarm payrolls" was \$609.37 per week.

If we estimate in an average week that an employee spends 20 hours at their computer, then 8.6 hours (or 43%) are unproductive and frustrating. For a 40 hour/week employee, that equals \$131.01 weekly or \$6,550.50 annually (50 weeks) in lost payroll.

<i>Number of employees</i>	<i>Total lost payroll per week</i>	<i>Total lost payroll per year (50 weeks)</i>
1	\$131.01	\$6,550.50
3	\$393.04	\$19,652.18
10	\$1,310.15	\$65,507.28
20	\$2,620.29	\$131,014.55
50	\$6,550.73	\$327,536.38
75	\$9,826.09	\$491,304.56
100	\$13,101.46	\$655,072.75
200	\$26,202.91	\$1,310,145.50
300	\$39,304.37	\$1,965,218.25

Some Things Are Beyond Price!

Lost wages and productivity are only one side of the issue for businesses; frustration and workplace interruption are the other. When those two issues combine, as what typically happens when employees have problems with their software, the cost is incalculable.

"Every computer user encounters problems with technology. Frustration is a common theme among computer users," according to research done by the Department of Sociology, University of Maryland.

Frustration is an important workplace issue because it is not isolated. When frustration is felt in the workplace, the actions taken can be long-lasting, far reaching and disruptive, "which can adversely affect work performance as well," states a Carnegie Mellon University and University of Maryland joint study, published in *Computers in Behavior* 22 (2006).

This study revealed that a single computer problem has the potential to reduce the employee's productivity for the remainder of the day. Frustration is not limited to the length of time the problem occurs, but also leads "to a longer term mood state that might last hours."

The effects of software-based frustration are also not limited to the individual. In most cases, they engaged one or several other employees to either help solve the software issue or to be an emotional support. Either way, other staff members, as well as the initially frustrated employee, are accumulating unproductive time.

"*Computer Rage*" is a term coined by the Laboratory for Automation Psychology and Decision Processes, at the University of Maryland. In their (2005) survey, they collected comments from survey participants regarding their frustrating computer experiences. Here are just a few:



"I hate not being able to understand things. It makes me feel inferior, computers have a way of doing that sometimes."

"I'm also very frustrated by people's frustrations with computers."

"I constantly cursed aloud (some REALLY bad words) and I think my colleague is still scared of me for that. It must've not been easy for her..."

"...I've slammed a keyboard a few times but haven't caused any permanent damage. Sometimes I feel like I want to scream when something doesn't work but I'd say I'm pretty good at suppressing my anger."

There are a wide range of reactions to coworker computer rage. Some employees may shut it out, literally, by closing their office doors or even leaving the office. Other employees may feel frustrated or angry as a result of the rise in overall tension in the office. Unfortunately, the energy generated by computer rage has the potential to spread to communications with customers, either by salespeople or customer service. This is when the cost of computer rage becomes unbearable.

Software Training Redefined: Educate Your Employees – Train Your Software

A bilateral approach to reducing employee frustration from software issues includes user education and improving the software's interface.

Employee Education: Make It Personal

An employee's frustration level is directly related to their self-efficacy. Employees who believe they can solve the problem will become less frustrated because they approach the issue as a challenge instead of a problem. Education that instills confidence and knowledge will result in fewer issues and lower levels of frustration.

Targeted materials and curriculum delivered by an experienced instructor are the keys to success. Adults become annoyed and even frustrated when they feel the material being taught is irrelevant (*Science*, 1992), so classes need to be built around the employees' responsibilities, needs and goals.

"Clearly, it would behoove businesses to invest in both the technology and the training of their staff in the technology in order to improve productivity."

Computers in Human Behavior 22 (2006)

Software Training: Customization without Programming

"Training" the software involves utilizing built-in functionality to personalize menus and layouts to the employee's role and responsibilities in the organization. Employees across different departments utilize software functionality in very different ways to accomplish their tasks. Customizing interfaces makes repetitive tasks easy and quick, and organizes important information for easy access.

The features and functions employees use most should be at their fingertips. Templates, macros, screen views, and menu options are other features that make software more intuitive to the needs of the employee. The use of those elements enables employees to more easily complete computerized tasks in less time.

Summary

“Computer rage” is inevitable and costs businesses millions of dollars annually in lost payroll, lack of productivity, and workplace tension. In order to achieve a reduction in the frequency and level of computer rage, businesses must invest in employee education and software customization. Increased knowledge and improved software usability eases employee frustration when software does not behave as expected. Confident employees are more apt to solve issues quickly, without disrupting the rest of the workplace, effectively saving time and money.

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KnowledgeSync Partner

Microsoft® Partner

NetSuite Referral Partner

American Society for Training & Development

Queens Chamber of Commerce (IT Committee Member)

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The Employment Situation: June 2009

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Social and Psychological Influences on Computer User Frustration (Newhagen book chapter)

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Computer Rage Survey

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A model for computer frustration: the role of instrumental and dispositional factors on incident, session, and post-session frustration and mood

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Enhancing Adult Motivation to Learn; A Comprehensive Guide to Teaching All Adults

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 Raymond J. Wlodkowski

Dependence of Cortical Plasticity on Correlated Activity of Single Neurons and on Behavioral Connexit

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