WORKBENCH – The Financial Benefit and Savings to the University

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ABSTRACT

Six years ago the User Services Group at Penn State's Center for Academic Computing (CAC) started a service called the Workbench. Its goal is to provide assistance to students, faculty, and staff by diagnosing hardware and software problems on their desktop machines and resolving the software problems. New software is also installed and configured. Hardware problems are referred to an authorized repair center. The Workbench staff uses a variety of software packages, tools, and techniques as well as acquired tricks of the trade to diagnose the problems. This poster session will discuss the cost of implementing and maintaining this service, the equipment and tools needed to diagnose and repair the problems, and the financial benefit to the University community of offering this service.

INTRODUCTION

The workbench is a service that is offered to all Penn State faculty, students and staff to help diagnose and repair software problems on their home or office PC's and Macintosh computers. This service has grown over the past six years to where we will diagnose over 1100 machines this year.

BACKGROUND

With the majority of new students arriving on campus with their own machines and with an already large number of faculty and staff machines on campus, the need for help in determining why their machines are not working properly has increased dramatically. Many times users would take their machines to a repair shop that would charge anywhere from $35 to $75 dollars per hour just to diagnose the problem. This method is a costly and sometimes ineffective way of fixing the problem. The workbench was created to meet the need for diagnostic service.

WORKBENCH

The workbench facility is a 12 ft. by 15 ft. room that is equipped with five work surfaces that are separated into two work areas, one with three tables for windows machines and the other with two tables for Macintosh machines. The windows work area consists of two monitors and numerous keyboards and mice. The Mac area has four monitors with several different keyboards and mice. The facility itself was very inexpensive to create. The room is a converted tape storage room and the equipment came from salvaged staff machines. A breakdown of the cost to implement the service is as follows:

Monitors -	$1000	Phones Lines	N/A
Input Devices -	$ 300	Ethernet Drops	N/A
External Devices -	$2000	Work Area	$5000
Modems -	$ 600	TOTAL COST	$8900

DIAGNOSIS AND REPAIR

A variety of software packages and tools are used, such as Norton Utilities, TechTools, Windows Restore disks, Apple system software disks and different virus scanners to diagnose problems. Diagnosing many different types of problems over the past six years, we have developed our own remedies for simple software problems. For example, rebuilding the desktop folder on a Macintosh to clean up possible corruption that may occur, causing the machine to crash on start-up. You can also fix a modem failure on a Windows machine by reconnecting the shortcuts on the desktop to the original application.

SAVINGS TO THE STUDENTS AND UNIVERSITY

Using an average cost of $70 per hour at the local computer shops in the area and the minimum of two hours per machine, the client will spend $140 per visit. The workbench has averaged 1100 machines per year. The total cost per year to the user community would be $154,000. Since the creation of the workbench six years ago the total savings to the students and University is approximately $924,00 dollars.

CONCLUSION

With the number of students arriving on campus with computers and the number of machines on campus for Faculty and Staff growing this service will continue to grow and expand. The hope is to keep it as a free service to the students and University.