SUNY and UCLA researchers begin electronic record preservation project

In August, the Department of Justice (DOJ) and 19 states made their final pre-verdict arguments in the ongoing Microsoft antitrust trial.

Most of the arguments continue to repeat those made in earlier claims, despite the changing business and online environments that have occurred since the trial began, involving over 76 days of courtroom testimony.

U.S. District Judge Thomas Penfield Jackson will base the first phase of his two-part verdict later this year on these arguments. Many industry observers say the Judge and the court have failed to note the rapidly changing nature of the industry and competition with the court being locked in a "time warp". The second part of the judge's verdict will not probably come until early next year.

Even if the case should turn against Microsoft, it is expected that the company will take the case through appeals courts for years, not unlike the IBM case which was finally dropped by DOJ. It is also expected that a new political administration will quash the case if it continues to drag on by election time. [RSH]

SUNY AND UCLA RESEARCHERS BEGIN ELECTRONIC RECORD PRESERVATION PROJECT -

You buy a house. You get a deed. It's in black and white on paper. You can feel confident that if changes are made to this proof of home ownership, you'll be able to tell.

But what if the deed were an electronic record? What if information on it were inadvertently changed - the number in the lot size; the letters in the owner's name - as the record is moved from one piece of software to another? How could anyone tell? How would you retrieve the original information now permanently deleted? And how can you be sure the record will still exist or be readable using technology 15 years from now when you're ready to sell your home?

A new nationwide research project led by archival information scholars at the University of Albany, State University of New York (SUNY), and UCLA will tackle this Information Age dilemma.

The project, which began this summer, is funded by a $424,796 grant from the National Historical Publications and Records Commission, the largest single award in the commission's history. The commission is the grant-funding agency of the National Archives and Records Administration.

"Long-term preservation of vital organizational records and critical research data created or maintained in electronic systems is one of the most critical global issues of the digital age," said Philip Eppard, dean of the School of Information Science and Policy at the University of Albany and principal investigator and director of the research project.

"Think about the role of records in society," added project co-director Anne Gilliland-Sweetland, assistant professor of information studies at UCLA's Graduate School of Education & Information Studies. "Business
(SUNY/UCLA Electronic Record Preservation Project - cont'd)

and government cannot conduct business without producing and retaining trustworthy records, and the trustworthiness of the records is at stake here. If you think Y2K is a problem, Y2K is just the tiniest inkling of what is coming on the preservation front."

The researchers note that currently there is no method of permanently preserving and authenticating documents created on electronic record-keeping systems within institutions like the government, universities, and corporations.

"As you move material from system to system (known as migration), there are all sorts of chances for error, accidental or deliberate, to crop up.", Gilliland-Swetland said. "Currently, we're turning over mainframes about once every three years, mainframe systems and microcomputer systems every 18 months. You're looking at a constant migration track."

Also at issue is the definition of a record versus a piece of information in a digital environment. In the paper world, information constantly is updated, and it's discarded when no longer needed. A record is never supposed to be changed - at least not without documentation of that change. The definition of a record often is dictated by the rules of evidence in a courtroom or by society's needs for historical and cultural evidence over time.

In a digital environment, often a record is just a collection of data fields that can be pulled up on a computer screen. "Someone will look at it, make a decision and then shut off the screen and the record's gone away. Legally and historically, you're required to be able to track what was seen on the screen in order to be able to understand how a decision was made.", Gilliland-Swetland said.

Along with the ease of making changes in an electronic environment, researchers face another challenge: the limits of the technology. - "We simply do not know how to build an electronic system whose content can endure for longer than a very short amount of time.", Gilliland-Swetland said. Such records can also include sounds, images, and moving pictures.

The 18-month initial phase of what is expected to be a three-year project is the American portion of the InterPARES (International Research on Permanent Authentic Records in Electronic Systems) based at the University of British Columbia's School of Library, Archival and Information Studies. At least 10 nations, including Australia and countries in North America, Europe, and Asia, are participating in the research.

In addition to SUNY and UCLA, the American arm of InterPARES includes researchers at the University of Missouri, Georgia Tech, and Penn State, as well as electronic-records specialists at the National Archives in Washington, DC. An industry group, including pharmaceutical, chemical, biotechnology, high-tech, and other businesses, which are also interested in developing electronic lab notebooks, is participating in the research.

The InterPARES Web site is at: \url{http://is.gseis.ucla.edu/us-interpares}

CLINTON ADMINISTRATION PLANNING COMPUTER MONITORING NETWORK -

The Clinton administration, much to the dismay of most civil liberties groups, is planning and developing a government-wide computer security monitoring system network - purportedly to protect the U.S.'s most important computer systems from hackers, thieves, terrorists, and hostile countries. The U.S. Defense Department began a similar program three years ago.

The 148-page plan, drafted by the National Security Council, describes building a network of electronic "obstacles", monitors, and analyzers to watch for suspicious activity on federal computer systems. The first 500