John GOES

The new law permitting electronic signatures may one day transform the way documents and reports are approved. For now, proponents are trying to spread the word and set up the infrastructure.

By K. Daniel Glover

If the digital zealots of the world are right, Oct. 1, 2000 marked the beginning of a revolution. That is the day John Hancock, one of the heroes of another great revolution, became passé. The insurance industry considered that day a "major milestone in e-commerce," and bankers hailed the beginning of "a new era." Even Wall Street, which had little to celebrate during the dot-com downturn of 2000, had visions of a brighter investment millennium.

So what made the date so special? The Electronic Signatures in Global and National Commerce Act, otherwise known as the E-SIGN Act, took effect. Congress passed the bill nearly unanimously last year, and President Clinton signed it into law last June 30. Now, say the law's advocates, the world just has to wait for businesses and consumers to realize how convenient and cost-efficient e-signing can be, and it will become as commonplace as e-mail.

In a nutshell, the new law gives electronic signatures the same legal weight as the traditional ink-on-paper variety. It defines an e-signature as any "electronic sound, symbol or process attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record." The statute does not, however, *require* any business or individual to use e-signatures or even to accept them from others.

Business interests actually wanted broader language than the law contains — the right to provide loan terms electronically if people preferred that, for instance, and the right to pre-empt state laws requiring companies to keep original paper records of transactions. But E-SIGN proponents ultimately accepted narrower language because of lawmakers' concerns about the potential for consumer fraud.

People familiar with e-signature technology cite the law's multiple business benefits. It allows completion of an entire transaction — with customers or, more likely in the short term, with other businesses — without leaving the office. Companies can save money on paperwork, filing space, travel costs and more.

Bruce Underwood, the chief information officer at Lease Point.com, which serves as a middleman for technology equipment leases, says companies "can reduce costs with their people, courier costs, printing and postage costs."

Companies also can save time — up to three or four days for each transaction or contract completed entirely electronically, Underwood estimates. And that savings, adds Bill Brice, the chief executive officer of AlphaTrust, an e-signature firm, helps financial executives eliminate what he calls "lost-opportunity costs" — the opportunities businesses lose to pursue new deals while they are occupied closing other deals.

Businesses can cut costs internally, too, by adopting e-signature technology as a way for chief financial officers to sign off on expense reports, travel requests and other paperwork. And the E-SIGN Act even covers notary publics. If two parties electronically sign documents that require a notary's signature, the notary also can sign electronically.

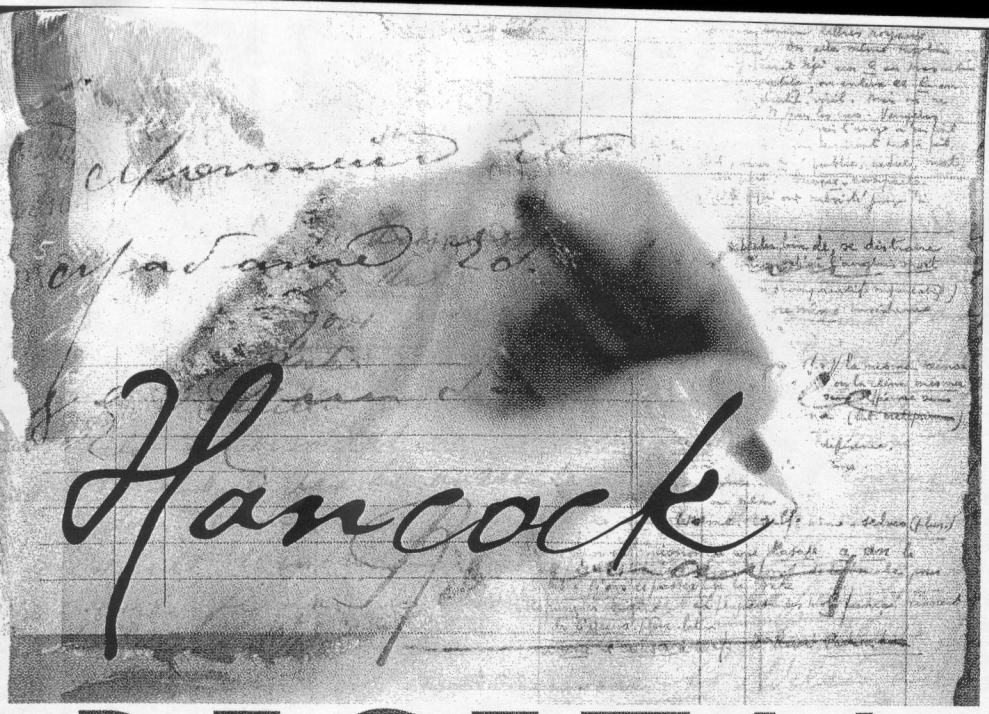
"This just revolutionizes everything," says Bartlett Cleland, the vice president of software and counsel for the Information Technology Association of America (ITAA), a leading E-SIGN advocate. "It throws open the doors."

The start of something big?

Proponents have good reason to be optimistic about the new law. For starters, the companies that provide the technology for electronic signatures have signed deal after deal since the law took effect. The E-SIGN Act is technology-neutral, meaning that it does not mandate the use of any particular technology for e-signatures. So companies are rushing to corner what they see as an emerging and profitable market.

E-Lock Technologies even provides its E-Lock Reader software for free in a bid to attract customers. The software, patterned after the Adobe Acrobat Reader, enables people who receive a digitally signed document to authenticate the digital signature and close the deal. "If you're in receipt of the document, then you can basically sign it for free, says E-Lock President Craig Bond.

Already, there are converts to the e-signature gospel, WarRoom Research Inc. among them. When the startup firm last year won a round of multimillion-dollar venture capital



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financing for its corporate intelligence business, it boasted of becoming the first company to consummate a financial transaction entirely online, just after the E-SIGN statute took effect.

Three industries — banking, insurance and securities — are particularly enthused about the new law. Bankers want their business clients and consumers to be able to open accounts, secure loans, transfer money and complete other transactions online. Insurance agents want to sell their policies, including those to businesses, over the Internet. And U.S. securities firms believe the law will help them stay competitive in the 24-7 global market.

The e-signature phenomenon seems likely to take root quickly within companies that do business with the government, adds E-Lock's Bond, in part because of government mandates to reduce paperwork.

Quebec-based Silanis Technology's experience suggests that the e-signature future is bright. Late last year, Silanis reported that the adoption rate for onSign, its free consumer e-signing software, skyrocketed from 20,000 home, small-business and home-office users to 100,000 users in only four months. The company attributed the growth to E-SIGN.

Problems of perception

AlphaTrust's Brice boldly predicts that e-signatures will be as commonplace as e-mail within five years. But business and technology analysts are skeptical of such hype. An analyst at Gartner Group in Stamford, Conn., estimates that a mere 30 to 40 percent of the public would accept and use digital signatures within five years. An analyst at Forrester Research was even more cautious, predicting that only 40 percent of the total marketplace that could use e-signatures eventually would — and that only 10 to 15 percent would do so by 2003.

The biggest hurdle to e-signature penetration is perception — first, that the technology is too complicated, and second, that it is too risky. "This stuff is about as simple and fun as a root canal," says James Van Dyke, a senior analyst at Jupiter Communications. "It's not easy, and it needs critical mass to have any value."

Congress might have been able to alleviate some of the uneasiness about e-signatures had it addressed two of the primary objections to the federal law: 1) the lack of sufficient statutory protection against identity theft and financial liability for criminal uses of e-signatures; and 2) the decision to let the marketplace define the technological standards.

But people behind the legislation and the industry say the law had to be limited in order not to retard the development of e-signature technology. They also insist that the technology itself, even at this stage of development, is adequate to protect against fraud. "Implementing an e-signature approval process can actually increase security," says Nathalie Benoit, public relations director for Silanis Technology. "The best protection [against] fraud is not only technology but also the actual process that customers or trading partners must go through in order to complete a transaction."

Perception sometimes is reality, though, so E-Lock's Bond says the burden is on the backers of e-signatures to convince businesses that exclusive reliance on electronic transactions and contracting are the way to go. "We've got the products," he says. "Now we've got to communicate in an effective way the benefits to the chief financial officers. That's our challenge."

The ITAA's Cleland, however, thinks businesses will have no choice but to downgrade the importance of ink and paper when they see the success of companies that adopt e-signature technology early in the game.

"There'll be a few people out there who adopt it as a company policy," Cleland says. "And when they start making money and realizing the savings ... they'll set the standard for the market. And then you'll have to explain to your senior manager why you're not [using it]."

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