
E-SIGNATURES IN THE REAL ESTATE WORLD: THERE'S MORE TO IT THAN THE TECHNOLOGY ENABLES AND THE LAW ALLOWS

by Bill Brice

With the passage of the U.S. federal E-SIGN bill, which took effect October 1, 2000, much attention has been paid to the fact that electronic signatures are now possible and hold great promise for completing business and government transactions electronically. According to the National Association of REALTORS®, at least 55 percent of homebuyers now use the Internet to shop for their home.

Electronic signatures will allow real estate transactions, traditionally slowed down by endless paper trails, to take place online. With just a few clicks of the mouse, property searches and inquiries, bids, mortgage and loan applications, contract approvals and negotiations, closings, secure account inquiries, client relationship forms, and more can be completed and approved in real time. The potential cost savings amount to hundreds of billions of dollars when electronic signatures are fully deployed, not to mention saving a forest or two. But the legislation, and the new products it is generating, actually raise more questions for business deployment than they resolve.

Confusion is growing. What does the law cover, and what important gaps remain? What is an electronic signature, and what are the remaining barriers to widespread adoption? What is really possible now in the real world? Under the E-SIGN Act, and similar state legislation (the Uniform Electronic Transactions Act, or UETA): 1). A signature, contract, or other record relating to such transaction may not be denied legal effect, validity, or enforceability solely because it is in electronic form;

ABOUT THE AUTHOR

Bill Brice founded AlphaTrust Corporation in 1998. He serves as the firm's CEO. Brice is an experienced software developer, a member of the Information Security Committee of the American Bar Association, and an active participant in various industry and Internet standards groups.

and 2). A contract relating to such transaction may not be denied legal effect, validity, or enforceability solely because an electronic signature or electronic record was used in its formation.

For political reasons, the legislators made the E-SIGN Act technology-neutral. An electronic signature is defined as: an 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. This means that an electronic signature may be made by pressing a touchtone keypad, clicking I AGREE on a Web page, or typing your name at the bottom of an e-mail. Clearly, these simple methods may be appropriate for small value transactions made by consumers, but most professionals agree that they are unsuitable for business transactions.

As the drivers of e-commerce activity shift, the demand for fully electronic transactions increases. But standing squarely in the path is the business requirement for a trusted document – a permanent business record. Over the past five years, a large quantity of business documentation has moved from manual methods (postal, overnight, and inter-office mail) to e-mail and Web delivery. However, the final record has not made the electronic transformation. For those final records that require an enforceable signature or tamper-evident original, the completion of a transaction has reverted back to paper. People still print, sign in ink, and file their permanent records. However, this is changing quickly.

If properly deployed, electronic signatures can be used in place of traditional pen and paper signatures where a legally enforceable signature is required. Electronic signatures are used to “sign” a document electronically and can be attached or embedded in the document to provide for the official “signing ceremony” which binds people or organizations to an agreement.

Electronic signatures may also be used to create a tamper-evident, permanent electronic business record, even where a legal signature is not required. Using a digital certificate or ID issued from a service provider, users have the ability to electronically sign documents and e-mails, ensuring that the message has come from only the intended party, has not been altered by anyone else, and can only be read by its intended recipient. An electronic signature can be a secure, user-friendly, and cost-effective method for validating an individual’s identity as well as

An electronic signature not only guarantees that documents and e-mail are secure, but also offers companies speed and convenience. This type of technology and business solution is of significant benefit to the real estate and financial industries. Brokers and their clients can replace intensive paper processes with rapid and secure online transactions.

ensuring that electronic documents are not tampered with prior to reaching their final destination.

An electronic signature not only guarantees that documents and e-mail are secure, but also offers companies speed and convenience. This type of technology and business solution is of significant benefit to the real estate and financial industries. Brokers and their clients can replace intensive paper processes with rapid and secure online transactions. For example: printing a mortgage application, signing it in ink, faxing or sending it through overnight mail can be inconvenient, time-consuming, and expensive. Electronically signing a mortgage application or any other type of form saves money and allows for real-time transactions. Successful loan officers, agents, lenders, etc. are integrating these technologies in ways that will fundamentally change their relationships with clients, vendors, investors, and insurers.

There are three questions that must be considered and answered when deploying any electronic solution for an enforceable and/or permanent electronic business record:

1. Is your solution technically secure? Can you prove the document has not been altered since being completed?
2. Will your transactions be enforceable? Have you met the necessary conditions to create a legally valid electronic signature?
3. How will you manage risk? Have you addressed authentication, authorization, and/or risk assumption?

Technical Security

The best technical solution for electronic signatures

is to use digital signature technology — Digital signatures are a type of electronic signature that uses complex cryptography to bind a person's identity to a specific document or transaction record. Typically, when using digital signature technology (also known as PKI technology, or Public Key Infrastructure), each person is issued a digital credential, known as a Digital ID or digital certificate. These credentials are issued by a third party that is known and trusted by all parties. The credentials are issued in such a way that they can't be altered without detection, so the information contained within them is safe from tampering. In some of the newest applications, the PKI technology is buried, so that the issuance of individual digital IDs is not required.

In addition to the ability to bind an identity to a specific record, electronically signed documents also have the property of a permanent business record. The signed documents can be safely stored and any tampering after signing will be detected. Thus an electronic document becomes permanent. It can be used to prove at a later date that a specific person signed a specific document at a specific time. Other technological solutions cannot provide such permanence.

PKI technology has been criticized as being difficult to deploy and use. Fortunately, this has changed dramatically over the past two years. It is true that setting up your own PKI system is daunting and suited only for large, technically adept organizations, but most organizations can take advantage of the technology by subscribing to an outsourced global trust provider that handles all the issues required, and delivers easy-to-use solutions to the desktop.

Enforceability

There is no point in concluding a business transaction electronically unless it can be enforced — upheld in court or arbitration. This, even more than technological complexity, has been the barrier to the widespread adoption of electronic signatures. Unfortunately, legislation has created a confusing picture. The E-SIGN law, in the jurisdictions where it applies, requires you to jump through many hoops in order to take advantage of it because it includes considerable consumer-notice provisions and opt-in requirements. Additionally, there are many states where UETA applies, not E-SIGN. Some states have other digital signature laws; some states have no laws covering electronic signatures.

E-SIGN and UETA do not apply to many transactions, such as Uniform Commercial Code Transactions under articles 3 through 9, and judicial documents. When evaluating the legislative landscape, there are at least 16 possible outcomes to the enforceability question, depending on jurisdiction, status of the parties, etc. So, the legislative changes, while promising in their encouragement of the use of e-signatures, do not on their own create the kind of reliable business solutions that companies need.

Risk Management

What happens if a signer is not who he or she claims to be? What happens if a digital certificate is fraudulently issued or fraudulently used? — If you use your own solution, or a technology-only solution, you must address the issue of identity authentication or face potentially large, open-ended liabilities. An outsourced global trust provider may offer warranty insurance against financial loss due to fraud up to pre-defined dollar limits. This is coverage well worth having, and it will encourage your business partners to do business with you electronically.

Considerations

There are many considerations that should be evaluated when selecting an electronic signature/electronic document business solution to help transform paper-based real estate transactions. Listed below are a few issues worth thinking about.

- 1. You need more than technology.** Public key infrastructure (PKI) technology has been available for more than two decades and is the technology most commonly used to create electronic signature and encryption software. However, should a digital ID be used under false pretenses or to commit fraud, PKI technology alone can't protect you. While technology can provide technical security for electronic signatures, it can't provide commercial trust, enforceability and risk management. Make sure your electronic signature vendor acts as a trusted third party which creates an environment for companies to conduct secure business transactions, like a credit card company that stands behind merchants and cardholders by offering a contractual legal framework and warranty protection.
- 2. E-SIGN is a law, but not the final word.** While E-SIGN makes electronic signatures valid and legal, it does not clearly provide an implementation plan or cover intrastate and international

transactions. When properly deployed, electronic signature vendors can provide technology solutions that are E-SIGN compliant. However, many vendors don't address the opt-in and notification provisions of the E-SIGN law or cover jurisdictional gaps created by legislation. Ask electronic signature vendors two questions: 1) Are you E-SIGN compliant?; and 2) How do you address and resolve enforceability issues for your customers?

3. **Using electronic signatures should save your company time and money.** While processing a mortgage application may not seem costly, getting the paper contract to the final step can end up costing hundreds or thousands of dollars in fax, courier, and overnight shipping costs, not to mention the indirect costs such as lost time, delayed capital deployment, and customer dissatisfaction. Electronic signatures can significantly reduce time and paper costs by allowing parties to securely conduct business electronically. Electronic signature providers charge either a flat rate, a per user or per transaction fee. Carefully evaluate which pricing model works best for your company.
4. **Know how your electronic signature works.** The use of digital certificates or IDs and their functionality continues to cause significant confusion. Make sure you understand the functionality your electronic signature solution offers. Ask if your digital certificate is authenticated and can be used to sign more than just e-mail. Few companies offer digital IDs that allow users to electronically sign enforceable transactions or to embed digital signatures in Microsoft® Word, Excel, or Adobe® documents, as well as attach signatures to documents created in other applications, including HTML, PDF, JPEG, and more.
5. **Do your homework.** There are so many enabling technologies available. In fact, it can become very confusing and overwhelming when evaluating all the possible options. And the more you research you do, the more you can get confused. Many technology solutions seem to meet real estate requirements by stating they can transform paper processes to electronic processes. However the solutions stop short of providing necessary business requirements and don't address legal enforceability, tamper-evident permanent business records, or document storage. Significant progress has been made with the development of enabling technologies that

provide for comprehensive and integrated electronic workflow processes; however you need to do your homework to find out what best meets your business requirements.

6. **Determine whether to build or outsource.** Some large companies choose to develop their own PKI, rather than purchase commercially viable products and services from vendors. Then, once the infrastructure is in place, the needed tools and applications must be developed. Most businesses find it is easier and more cost-effective to purchase outsourced electronic signature products versus developing their own PKI solution, which can cost millions of dollars and has limited functionality.
7. **Select a solution that is flexible and adaptable.** To remain competitive, select a solution that provides for flexibility and adaptability as your business requirements change. There are a limited number of companies that have integrated business requirements and are able to provide reliable, simple, and easy-to-use point and click operations to complete complex business documentation. Some companies have even streamlined deployment to include Web-based applications, eliminating the need for users to install hardware or software, with the only requirement for use being a standard Web browser. In this case, removing cumbersome IT plumbing from the deployment process facilitates hassle-free and happy end-user adoption. Keep in mind that whatever your real estate technology requirements may be, solutions exist that are designed to be flexible and adaptable to security technology as it evolves, without creating a dependency on any one product or technology.

CONCLUSION

In summary, transactions secured with electronic signatures are key to enabling expanded e-business. Your client's electronic signature, as well as your own, will soon become an important business tool—as important as e-mail or Web access. But before leaping in, recognize that technology and legislation are not enough.^{REI}