

The Difference Between Digital Signatures and E-Signatures

The terms "digital signature" and "e-signature" are often used interchangeably but there are important differences between the two technologies. These differences could make a significant impact when it comes to customer trust, document security, and legal compliance with industry and international standards. As businesses move towards a more paperless work environment, understanding the differences between e-signatures and digital signatures will allow them to better evaluate document management platforms and determine which one is right for their organization.

What is an E-signature?

An e-signature, or electronic signature, can be defined as any electronic symbol, process, or sound associated with a record or contract where there is intention to sign the document by the party involved. E-signatures are popular because they are easy to use – customers can place their e-signature on a document online with the click of a mouse or by tracing their handwritten signature on a document with their fingers.



The purpose of an e-signature is to simply verify a document. Many organizations use e-signatures in contracts and agreements like loan applications and other financial contracts. Both the Human Resources and sales department of businesses can use e-signatures to onboard new employees and sign prospective clients.

What is a Digital Signature?

A digital signature is a specific type of electronic signature with the purpose of protecting the document. Digital signatures are the most secure type of electronic signature relying on encryption and algorithms to both sign and verify the authenticity of a document. When someone signs an electronic document with a digital signature, their digital signature serves as a virtual “fingerprint” used to authenticate their identity and the document they sign.



Digital signatures are legally binding and can be independently verified without any reliance on the vendor. Once a document is signed with a digital signature, a digital certificate is permanently embedded in the document, ensuring that if there are any changes to the document, it can be proven. A digital certificate can also accurately identify the signer and the time of their signature.



What is the Difference Between Digital Signatures and E-Signatures?

Both types of signatures save time and money compared to using traditional pen-and-ink signatures on paper documents but there are some significant differences between digital signatures and e-signatures.

Digital signatures are regulated and authorized by certification authorities. E-signatures aren't regulated like digital signatures causing them to be less favorable in different states and countries because their authenticity is not verifiable, and the documents signed with e-signatures can be easily tampered with. Additionally, each e-signature vendor makes their own standards while digital signatures comply with industry and international legal guidelines.

A digital signature consists of security features including cryptographic algorithms meant to protect the document from tampering. The advanced encryption and decryption procedures make this type of signature highly secure. An e-signature is significantly less protected and doesn't use cryptographic algorithms for security. Users of e-signatures will need to verify with their e-signature software platform their specific security controls.

When it comes to security and integrity, digital signatures outweigh e-signatures every time. When a document is signed digitally, a unique identity credential known as the digital certificate, is permanently embedded into the document. The digital certificate accurately identifies the signer and time of signature in addition to ensuring that if the document is changed or tampered with, it can be proven.

A comprehensive audit trail that tracks and records every action of the digital signing process can also be produced with digital signatures. This audit trail includes the initial creation of the transaction, the user's method of authentication and when documents were sent and signed by each party and more.



With digital signatures, you have permanent ownership and control of the legal evidence independent of your e-signature vendor and your signatures can be proven valid for years to come. This independence and ability to be verified is critical in highly regulated industries such as healthcare, real estate and financial services.

The real difference between digital signatures and e-signatures comes down to independence. Digital signatures can be verified independently, without relying on the vendor. In order to verify a basic e-signature, the e-signature vendor has to prove the legitimacy of a document. Many e-signature vendors link signatures to a centralized server rather than embedding the signatures in the document itself like digital signature technology - which ensures that signatures and their embedded legal evidence travels with the document for its entire life.

At SIGNiX, we combine all the security of digital signatures with the convenience of electronic signatures using our patented cloud-based technology.