

eSignatures: Good for the Environment and Good for Business

A decade ago there were some predictions that there would be less usage of paper ultimately leading to a paperless society. Contrary to those predictions, computers, printers, fax machines and other information technologies have created an increased demand for paper for printing photos, recipes, school work, Web pages – and business documents.

All this printing, copying and faxing of paper has a significant cost on a number of levels. Printers, consumables, and paper represent a sizable ongoing expense item. Then there is the environmental impact of manufacturing the printers and ink or toner cartridges, making the paper, and then transporting and ultimately disposing of the paper and the consumables. There is also the fuel consumption and associated global warming impact when physical documents are sent around the world via ground or air courier services. For instance, the U.S. pulp and paper industry is the second largest consumer of energy and uses more water to produce a ton of product than any other industry, and the EPA estimates that more than 400 million ink and 100 million toner cartridges end up in landfills each year.

Given the cost of paper, it behooves the smart business person and anyone concerned about maintaining a livable environment to think **twice about hitting “print”** and to aggressively pursue ways to reduce paper consumption. While modern technology has made it fast and easy to print documents, this ease of use is a double-edge sword since it causes more pages than ever to be printed. In fact, studies indicate that the average U.S. office worker prints 10,000 pages per year. Rarely do users think about the cost as pages pile up unread on the printer or in trash or recycle bins. Even worse, all this printing can represent a significant security risk – while you may enforce strong passwords on log-ins, printed documents lack any form of security and can be easily be lost, copied, stolen or manipulated using nothing more sophisticated than scissors and glue.

Over the last few years, a number of technologies have emerged that could – if widely adopted – lead to an overall decrease in the amount of paper consumed. For example, with the emergence of social media tools like blogs and wikis that encourage online interaction, people are spending time reading information

DocuSign met our goal of saving 10,000,000 sheets by Earth Day 2008.

In addition, hundreds of people sign green with DocuSign every day.”

electronically rather than on printed paper. More and more business activities are being done online using email and instant messaging. New devices, such as the iPhone, offer the potential to let people take maps, calendars and photos with them electronically rather than creating a printout. But even with these tools, paper consumption continues to grow at an alarming rate. Paper consumption has tripled over the past three decades and is expected to increase by half again by 2010, according to industry estimates.

This is due in part because there are many areas where paper-processes still reign supreme. One of those areas is when it comes to legally binding documents that many people still believe must be signed with wet ink signatures. The requirement for an ink signature leads to the wasteful printing of massive amounts of documents – virtually all of which were created electronically – and to courier delivery of these documents. If it weren't for the need for an actual wet ink signature, why would anyone bother with the expense and hassle of printing a Microsoft Word or Adobe Acrobat document and sending it via FedEx when it could be delivered instantly using email and an online service? It simply doesn't make sense from a business or environmental standpoint.

The Green Business Case for eSignatures

Business activities that take place online eliminate the need to print out paper, lower business costs, increase the speed of business, and are good for the environment. For businesses that are looking to increase profits, reduce costs and help the environment, shifting paper-based processes online is a great place to start. Using electronic signature technology, also known as eSignatures, eliminates the need for wet-ink signatures. Instead of printing out documents and forms for the sole purpose of obtaining signatures, all parties can simply e-sign documents online through a Web browser.

Using a web-based eSignature solution makes it easy and affordable for businesses to immediately reduce their environmental impact since there is no costly software to purchase and install. The service replicates the physical signing model with virtual yellow "sign-here" tabs and electronic representations of actual signatures. This process dramatically increases the security of the documents compared to paper-based documents by offering a full audit trail and technology such as hashing algorithms that ensure a signed document cannot be altered in any way.

The DocuSign Eco-Challenge

As announced on Earth Day 2007, DocuSign is challenging itself, customers and partners to save 10 million sheets of paper through use of the DocuSign eSignature service by Earth Day 2008. This is just the beginning and represents a small fraction of the estimated 8 million tons of office paper (3.2 billion reams) of paper used each year in the U.S. The use of online signatures is growing exponentially and this rapid adoption will lead to a significant reduction of the use of paper and fuel by corporations.

Consider the environmental impact of just 10 million pages:

- » 2,500 trees
- » 56,000 gallons of oil
- » 450 cubic yards of landfill space
- » 595,000 kilowatts of energy
- » 1.04 million gallons of water

Now consider if all U.S. businesses adopted eSignature technology for documents that are currently be printed in order to obtain signatures, an endeavor that requires an estimated 10 billion sheets of paper:

- » 2.5 million trees
- » 56 million gallons of oil
- » 450,000 cubic yards of landfill space
- » 595 megawatts of energy
- » 1 billion gallons of water

The Paperless Future

With technologies such as eSignatures, high-quality displays and the growth of online news outlets now becoming mainstream, businesses and individuals have the opportunity to have a tremendously positive impact on the environment by not just recycling but actually reducing or eliminating consumption of a set of products – paper, printers, copiers, toner cartridges and overnight delivery services – that have an extremely negative impact on the environment. Moreover, use of online tools will dramatically improve productivity and significantly lower the cost of doing business. The road to future no longer needs to be paved with paper.



About DocuSign

DocuSign offers an electronic signature service that provides the simplicity, speed and security required to deliver, sign and store documents. Designed from the ground up for business-class usage, this service integrates the technical infrastructure and legal compliance needed to operate an end-to-end signing service. DocuSign customers span a variety of industries and range from the largest corporations to the smallest branch offices. DocuSign, Inc. is a privately held company based in Seattle, Washington.