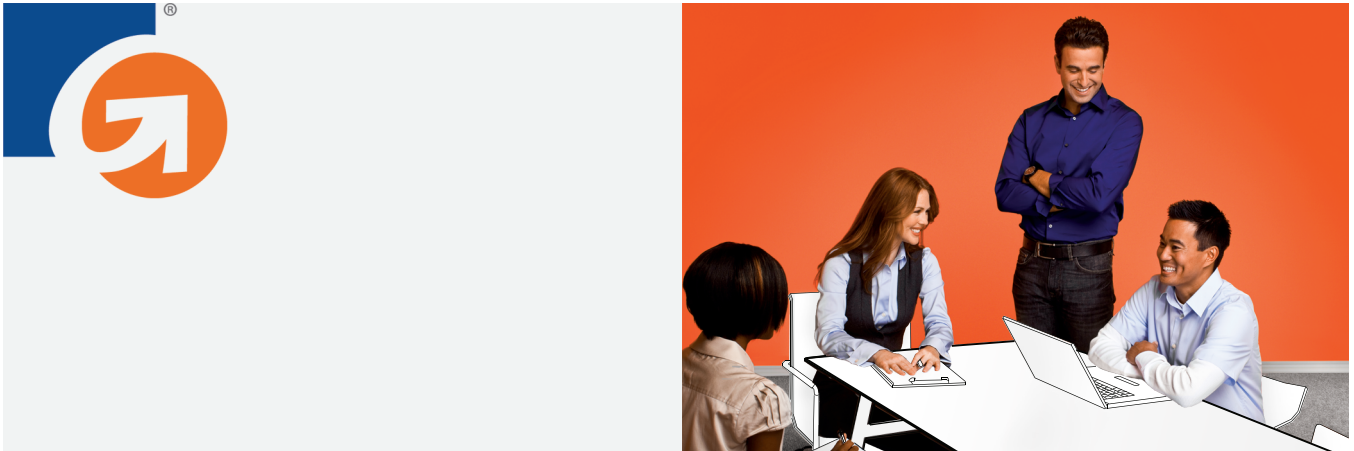


GUIDE



CREATING AN E-COMMERCE WEB SITE: A DO-IT-YOURSELF GUIDE

Creating an E-commerce Web Site: A Do-It-Yourself Guide

Introduction

Over the past 10 years, e-commerce has been one of the fastest growing segments of the retail industry. That may seem obvious to anyone who has ever shopped online, but the size and speed of the boom has been truly astounding. There are already hundreds of thousands of online stores around the world wide web, and according to some estimates, merchants open 20,000 new e-commerce storefronts *every week*.¹

The popularity of the online marketplace shows no signs of slowing, so now may be the perfect time to start selling on the web. There are more options for creating an e-commerce site than ever before. You can work with an e-commerce platform provider to set up an online store, or you may want to let web professionals handle the design and development of your site from start to finish.

Working with services like these offer some convenience, but if you want additional flexibility and control, your best bet may be to create your site on your own. With a little know-how and some easy-to-use tools, you can develop an e-commerce site that looks and functions exactly the way you want, helping you meet the needs of your customers and your business more effectively.

In this guide, you'll learn about what goes into creating your own do-it-yourself (DIY) e-commerce web site, from picking the right tools and services you'll need to create your web pages, to selecting the best hosting provider and payment solution to fit your business, to figuring out the best security for your site.

Choosing Your Web Design Tools

After you have your business plan in place and are ready to focus on your new online venture, it's time to start creating your e-commerce web site. The first step is selecting the tools you want to use to design and code your site.

You can start from scratch and code everything by hand, but this requires solid knowledge of HTML, PHP, MySQL, and other programming languages. To shorten the learning curve, you might want to invest in web design software like Adobe Dreamweaver or Microsoft Expression Web. Depending on what version you buy, these programs can run anywhere from \$50 to \$300. If you don't have the budget to spend on software, there are also several free open source options to choose from, including KompoZer and BlueGriffon (formerly Nvu). While they may not offer all of the sophisticated features that paid software does, these open source programs are still powerful and easy to use.

Everyone likes different web tools for different reasons, so it's hard to say which will be the best program for you. However, there are some key elements you should look for in any software.

An easy-to-use interface is important, especially if you're less familiar with HTML and would prefer to work with a WYSIWYG (What You See Is What You Get) application. WYSIWYG HTML editors allow you to design your site by clicking and dragging elements and inserting text

Before You Start Creating Your Site

Step 1: Create Your E-Commerce Business Plan. What are you selling? Who is your target market? How much money will you need to invest to get your e-commerce business off the ground? Do you want to incorporate or operate as a sole proprietorship? These questions may seem like no-brainers, but it's worth taking some time to sit down and map out a strategy.

Depending on the size and complexity of your business, this could take anywhere from a day or two to several months.

Learn the language(s) of the web

HTML, PHP, ASP, SQL, CSS, AJAX — today's internet encompasses an alphabet soup of different programming codes and tools. While you don't need to be an expert in any of them to create a web site on your own, you should at least familiarize yourself with these technologies. There are a wide range of resources available at your local library, bookstore, and of course online. The [World Wide Web Consortium](#) is a great place to start.

and links like you would in a word processing program. While you design your site, the WYSIWYG editor will generate the HTML code for you. Many of these editors will allow you to toggle between the visual layout and the site code, giving you flexibility to tweak the HTML to see how it affects the page layout, and vice versa.

If your web site is small and simple, HTML/CSS is fine. On the other hand, if the content or structure of your e-commerce site is going to change frequently, you may want to consider an open source content management system (CMS) such as Joomla and Drupal. A CMS is software that allows users to add new web pages—or change content on existing pages—quick and easily. With a CMS in place, you won't need to worry about coding new content in HTML because the system will do it for you.

When you're considering which web site building tools to use, you should make sure that the applications you choose support all of the functionalities that you want in your web site. For example, if you plan to use a MySQL database to power your product catalog, be sure that you can integrate it into your site using the program you decide to go with. If you're not completely sure about the functionalities you may need, spend some time exploring web sites that you like and pay special attention to the features that appeal to you the most. Aside from product catalogs, many e-commerce sites offer newsletter registration forms, customer support widgets, and other elements that make a site more interactive. After you have a list of features you want on your site, do a little research to learn more about the technologies behind them.

Selecting Your Web Host for E-commerce

Now that you've got an idea about how you're going to build your web site, you need to think about where to host it. There are hundreds of different web hosting providers to choose from, so how can you be sure you're making the best decision?

Even though it may seem like a daunting choice, picking the provider that's right for you can be an easy decision if you pay attention to a few key issues. The first is price, and while it's easy to do a quick price comparison on the web, the cheapest host you can find may not always be the best. Providers that have lower prices sometimes skimp in other areas, like customer service or technical support. You should also be on the lookout for providers that may offer low prices up front, but then run up charges with hidden fees.

In addition to price, you should also consider the type of features offered by a hosting provider. Since PHP and MySQL currently play an integral role in creating dynamic, interactive e-commerce web sites, picking a host that offers compatibility with these languages should be at the top of your list. If you're interested in having email addresses that match your domain name—an important factor when considering how you will communicate with your customers and any employees you may have—access to an email server is critical. Host-based security services, like firewalls and virus detection, are also must-haves.

It's also a good idea to check how much uptime a hosting provider guarantees. A high uptime percentage helps to ensure that your web site will be available when a visitor types your web address into a browser or finds your site via a search engine. Choosing a host that

Jumpstarting Your Site Design with Free Templates

Even if you decide to create a DIY web site, you don't need to start with a blank slate. There are a wide variety of free HTML templates that you can tweak to meet your needs available at sites such as 4templates.com or freewebtemplates.com. Before you start re-coding, however, be sure that the designer really has given permission for others to use and change the look of the template.

Is Free Web Hosting Right for You?

It's often said that the best things in life are free, but when it comes to web hosting, this may not be the case. If you're running an e-commerce site, a free hosting provider may not give you the reliability or features you need to keep your customers happy. Before you decide on a host, be sure it offers the bandwidth to support all of the traffic to your site and meets your needs for guaranteed uptime.

offers frequent backups is also a safe bet just in case your site goes down and you need to recover your files. Last but not least, if you're new to building web sites, then finding a hosting provider that offers solid customer and technical support should also be a top priority. A good hosting provider will be able to answer any questions you may have during your site launch and should be able to help you quickly address any day-to-day problems that may arise.

Picking a Payment Solution

After deciding where you'll set up shop on the web, the next step is choosing a method to accept payments on your site. The payment process is what puts the "commerce" in "e-commerce." There are two kinds of payment systems that you should consider for your site: a payment processor and a payment gateway.

Payment processors, like PayPal Website Payments Standard and Google Checkout, will send a customer to a checkout page that is hosted by the processing company. After customers submit their credit card information, they will be sent back to your web site. In contrast, payment gateways—such as Authorize.net—integrate directly with your shopping cart and the transaction is essentially invisible to your customer.

There are pros and cons for payment processors and payment gateways that you should weigh. For some web site owners, payment processors can be easier to use because they do not require any backend integration with web sites. When you use a payment processor, you also don't have to worry about securing financial transactions because the processing web site will take care of it for you. However, a payment processor will also take your customers away from your site during checkout, a process that may cause confusion and may give them second thoughts about completing their transaction. Payment gateways require more technical know-how, and you will have to obtain an SSL certificate to protect credit card transactions on your site (learn more about SSL security below). Even with these additional considerations, a payment gateway will keep customers at your web site during the transaction, making the user experience smoother and more professional.

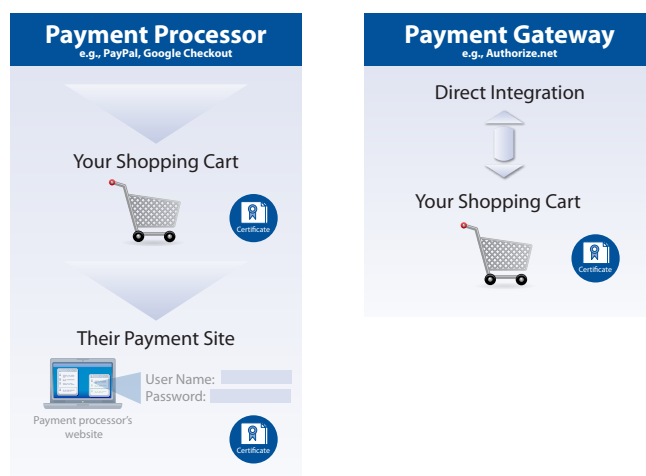


Diagram 1. E-commerce Web Site Payment Processing Flowchart

Before you decide on a payment processor or gateway, you should also research the transaction, set up, and service fees that each provider charges. Average charges vary widely across the industry, with some processors charging a cash fee plus a percentage of each

Don't Forget to Register Your Domain Name

Before you can host your web site anywhere, you'll need a domain name. Pick something that your customers will find easy to remember, but try to avoid plays on words and other phrases that are not search engine-friendly. For example, if you have a business selling cat toys, CatToyOutlet.com is better than PurrfectlyPerfect Toys.com.

Also, remember to complete your metadata fields with relevant content and to submit your site to the [Open Directory Project](#), [Google](#), [Yahoo](#), [Bing](#), and other popular search engines so your customers can find you.

transaction (for example, PayPal charges 30 cents plus 2.9 percent of every transaction for merchants who receive \$3,000 or less per month in payments). Setup fees for gateways can cost anywhere from \$99 to \$299, and fees typically range from 10 to 50 cents per transaction. Merchants with high sales volumes can often find providers that offer a fixed monthly rate for transactions. It is often best to start with your own bank to see what merchant solutions for credit card processing they recommend.

While set up costs and fees are important, there are a few more features that you should think about before making a decision. Check to see whether the payment services provider you're interested in offers automatic tax calculations. This will make it much easier to figure out how much sales tax you should be collecting and will cut down on accounting headaches during tax season. Also be sure to find out if the processor or gateway you want to use can automatically calculate shipping charges. With this kind of service, you'll know exactly how much to charge your customers so shipping costs won't eat into your bottom line.

Choosing a Shopping Cart—or Creating Your Own

At brick-and-mortar stores, shoppers pick items from shelves, put them in a cart or basket, and usually bring them to a cashier when they're finished shopping. You'll need to set up a similar system—commonly called a shopping cart solution—for your online store. Typically, shopping cart software allows people to select items from web pages, add them to their “cart,” and walk them through the purchase process when they are ready to check out. Most shopping carts will also include taxes and shipping charges to give customers a total for their order.

When choosing a shopping cart to go with your payment processing solution, make sure it's supported by your hosting provider and look to see if the cart offers the payment and shipping options you need. There are a number of open source carts with active communities like osCommerce and Zen Cart, as well as GeoTrust Partner solutions like 3dcart.com. You can also create your own shopping cart using web page authoring programs like Dreamweaver or programming it from scratch using PHP, MySQL, and other web programs and languages.

SSL Security: An Absolute Must-Have for Your Site

A nice site design and seamless integration with a payment system are great, but they won't mean a thing if you and your customers aren't protected from fraud and theft. Security is one of the biggest concerns that shoppers have when it comes to buying online. In fact, a recent survey found that 45 percent of consumers are worried about identity theft when they buy on the web.² Even more troubling for e-commerce business owners, security concerns like these have a serious impact on consumer behavior. The National Cyber Security Alliance recently found that a majority of Americans—64 percent—have abandoned an online purchase because they were not certain that a web site was secure.³

Given these fears, SSL security is critical to your web site. With an SSL certificate, you'll be able to prevent cybercriminals from intercepting financial data as it's transmitted over the internet. Not only that, but you'll also be able to show your customers that your business is legitimate and can be trusted.

What is an SSL Certificate?

SSL certificates are bits of code that you install on your site that will encrypt logins, passwords, credit card numbers and other information so that hackers can't intercept the data and decode it. After an SSL certificate is installed on a site, it uses an extensive system of security checks to establish a domain and server as trustworthy. To encrypt logins, registration forms, credit card transactions and other situations where sensitive information needs to be sent between web browsers and servers, an SSL certificate uses a private "key"—essentially a long string of complex code—that is unique to the individual server that hosts the web site and a public key that is sent to web browsers. The private key can only be "unlocked" by the public key, and vice versa, helping to ensure that the data remains secure.

The vast majority of businesses obtain SSL certificates from third-party providers called Certificate Authorities (CAs). In addition to providing the SSL certificate, a CA will also authenticate a business to help ensure that the company represented by the web site actually exists. For example, GeoTrust will check domain registration information and request business registration documents to verify a web site owner's identity and location.

SSL is now considered a standard internet security technology, but that doesn't mean that all SSL certificates and providers are the same. Just like picking your design tools and your web host, there are several important factors you should think about before you select a CA and an SSL certificate.

Choosing the Right SSL Provider

Before you worry about any technical specifications, finding a credible SSL provider that has a strong reputation for online security should be a top concern. Why is this so important? With SSL security from a well-known CA like GeoTrust, your visitors will know that your company has been verified by an objective third party recognized for its strong security practices. People will be more likely to buy when they know that their information is protected and your business is safe, helping you turn that 64 percent of shoppers who have abandoned an online purchase into paying customers.

Without legitimate SSL security, you run the risk of losing business because customers won't recognize that your site is safe. Even worse, it can take just one fraudulent incident to damage your business reputation, even if it wasn't your fault. Customers may still blame you and tell everyone they know—from family, to coworkers, to a potential audience of millions on popular social media sites like Facebook, Yelp, and Twitter—that your site can't be trusted.

Along with the reputation of your SSL provider, you also need to research what type of SSL certificate will be best for your site. Fortunately, this shouldn't take too much of your time since there are only three types of SSL certificate that you need to learn about: Extended Validation, organization validation, and domain validation.

Types of SSL Certificates

Domain validated SSL is a basic certificate that provides encryption and only verifies that the person applying for the certificate has the right to use a specific domain name. These certificates are ideal for business owners who want to get a certificate as quickly as possible, however, they represent the lowest level of SSL security. Organization validated SSL, on the

other hand, also confirms that a company is a confirmed legal entity and establishes a physical location for that organization, giving customers more assurance that the business is legitimate. When people click on an organization validated certificate, it will display your company name, and trust marks provided by CAs may also display your business name. GeoTrust offers a domain validated SSL product—QuickSSL Premium—as well as an organization validated certificate called True BusinessID SSL.

For sites that handle financial transactions, Extended Validation (EV) is your best bet. In addition to the encryption and authentication that organization validation provides, EV SSL also offers a clear sign that your web site is safe: the address bar in high-security browsers will turn green and show the name of your company as well as the name of your SSL provider. EV SSL requires a more thorough authentication process, but many businesses experience increased conversions and higher sales thanks to the green address bar and recent research shows that top performing sites are more likely to use EV SSL.⁴ If you're looking for an EV SSL certificate, GeoTrust True BusinessID with EV is an ideal choice.

Conclusion and Resources

E-commerce has made it possible for entrepreneurs to extend their reach farther than they could have ever imagined. You've just read about all of the different components that go into creating an e-commerce web site, but here's a quick recap that will help you put everything into place:

- 1. Choose your web design tools** — Determine what tools you're going to use to design and your site.
- 2. Select your web host** — Find a hosting provider that can accommodate all of the tools you want to use and offers the features you need.
- 3. Pick a payment solution** — Weigh your options to see if a payment processor or gateway is right for you.
- 4. Choose or create a shopping cart** — Your customers are going to need a way to select items and buy them, so find a shopping cart solution that meets your needs.
- 5. Obtain credible SSL security** — Work with a provider like GeoTrust to get credible SSL protection for your site.

With the rise of identity theft and malware, item five is particularly important. If customers don't believe that a site is secure, they won't choose to spend their hard-earned money there. By using a reliable SSL certificate provider, you'll be able to arm your site against online threats and send your customers a clear message that your company can be trusted.

Not all SSL certificates are equal, however. Using the information in this guide, be sure to invest in a solution from a credible provider like GeoTrust that will help you build confidence in your site, communicate your commitment to online safety, and protect your business. Taking the time to find the right SSL certificate for your site now will pay off in the future, helping to ensure that your business is a success.

More Bits Mean More Protection

When you begin to research SSL certificates, you'll notice that different certificates may offer different levels of encryption measured in bits. Usually, certificates range from 40-bit to 256-bit encryption. As you might have guessed, 256-bit encryption is the strongest, but just how strong is it? To give you some idea, 128-bit encryption can calculate 2^{88} times as many combinations as 40-bit encryption, making it **over a trillion times a trillion times stronger**. That means it would take a hacker a trillion years to break into a session protected by a 128-bit SSL certificate, and even longer to hack into a session secured with 256-bit encryption.

When you're comparing CAs, also check to see if they're using 2048-bit roots that support up to 256-bit encryption. This means that the CA follows the latest recommendations developed by the Certificate Authority Browser Forum—an industry oversight organization—to help ensure that SSL certificates are as strong as they can be.

For more information about how to build your own e-commerce web site, check out these resources:

- **Starting an Online Business All-in-One Desk Reference for Dummies**
by Shannon Belew and Joel Elad; For Dummies, 2009
- **Best Website: Simple Steps to Successful Websites**
by Nelson Bates; BookSurge Publishing, 2008
- **Beginning ASP.NET 2.0 E-Commerce in C# 2005: From Novice to Professional**
by Cristian Darie, Karli Watson; Apress, 2005
- **How To Pick A Shopping Cart That Makes You Money**
by Daniel Hall and Tom Antion; CreateSpace, 2009
- **Effortless E-Commerce with PHP and MySQL**
by Larry Ullman; New Riders Press, 2010

SSL Products from GeoTrust

GeoTrust offers a range of reliable low-cost SSL certificates to meet your individual needs:

- **GeoTrust® True BusinessID with EV** — Get the credibility of a well-established SSL provider, the green address bar and a dynamic trust seal from GeoTrust at an affordable price.
- **GeoTrust® True BusinessID** — Get name brand SSL that authenticates your business identity along with a dynamic trust seal at an affordable price.
- **GeoTrust® True BusinessID Wildcard** — Protect unlimited subdomains with reliable SSL from a certificate authority that maintains a reliable, military-grade data center.
- **GeoTrust® QuickSSL® Premium** — Get inexpensive basic SSL encryption from GeoTrust's fast and convenient issuing system.
- **GeoTrust® Enterprise SSL** — Purchase SSL certificates in bulk, issue them on-demand and manage them all through a central management console.

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2. "Consumers need to take more precautions against online identity theft" by Linda Rosencrance, SecurityNewsDaily.com, January 17, 2011: http://www.msnbc.msn.com/id/41123534/ns/technology_and_science-security/
3. "Majority of Americans Have Abandoned an Online Purchase Due to Security Concerns, Poll Finds"; National Cyber Security Alliance, November 18, 2010
4. "Extended Validation SSL Server Certificates: Both End-Users and Site Owners Look Up to the Other 'Green' IT"; Aberdeen Group, 1/31/2011: <http://www.aberdeen.com/Aberdeen-Library/7044/RA-secure-sockets-layer.aspx>