



GUIDE TO WEBSITES AND E-COMMERCE

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WebCentro Guide To Websites And E-commerce

CONTENTS

1. What is a Website?	1
2. What is E-commerce?	1
3. Benefits of having a Website	2
4. Website Security	4
4.1. Why is website security important?	
4.2. How do you know if a website is secure?	
5. Online Credit Card Payments	6
5.1. Steps in making an online purchase	
5.2. Why are credit cards payments so popular online?	
5.3. How do online credit card payments work?	
6. Glossary of Internet Terms	7

About WebCentro

We supply professional business website packages and e-commerce solutions. Contact us today to arrange a free consultation and to determine your business's e-commerce needs.

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1. WHAT IS A WEBSITE?

A website is the permanent face which your business presents to the world via the Internet. It can be very simple such as a home page and contact details, or it can be more complex by including interactive components such as an online order form, a shopping cart or a detailed product catalogue.

A website is available to view via a web browser (such as Internet Explorer) and is available 24 hours a day, 365 days a year. Anyone in the world who has an Internet connection and a web browser will be able to view your website.

2. WHAT IS E-COMMERCE?

Electronic commerce, e-commerce, or e-business, is the use of computers and electronic communications networks to do business. This covers a wide range of areas, including using e-mail, online banking, online shopping, web-based marketing and online product catalogues. E-commerce is a worldwide phenomenon, which will undoubtedly impact on national economies, businesses and consumers.

E-commerce is about helping you to improve the ways you do business: with your customers, and with other businesses. Small business involvement in e-commerce can take a number of forms, with varying levels of cost and complexity, depending on your needs.

The first step in e-commerce is setting up an Internet connection to browse the web and use e-mail; the use of e-mail by small business can provide a rapid and reliable way to communicate with suppliers or to receive and respond to customer queries.

Setting up a company website is the second step on the road to e-commerce. A website can contain a variety of useful e-commerce features such as online orders, online product promotion, online product catalogues, online bookings and appointments, customer feedback sections and online quotations.

An online shop is probably the most complex type of e-commerce: this is a website which has been set up for the purpose of taking orders for products, using either an online shopping cart or an online order form. Many online shops allow the customer to enter their credit card details online to pay for their purchases.

Your business can benefit from e-commerce in many ways and undoubtedly the most important initial step is setting up a website for your business.

3. BENEFITS OF HAVING A WEBSITE

- 1. Time saving**
- 2. Cost saving**
- 3. Improve customer service and support**
- 4. Win new customers**
- 5. Promote your business image and products**
- 6. Find out more about your customers**
- 7. Gain access to a larger market**
- 8. Gain an advantage over your competitors**

1. TIME SAVING

Your website works for you 24 hours a day, 365 days a year. By providing information to your customers online via an easy to use website, you are letting the customer come to you to find what they want. This has the added benefit of reducing the time spent on the telephone answering general (non-sales producing) inquiries.

By offering an online order or booking facility, customers can fill out their order details online, which otherwise would have had to be taken down over the phone or read from a fax. This saves time and also reduces the chance of errors and misunderstanding.

2. COST SAVING

Save money on the cost of sending up to date pricelists and product information to your customers. Your customer can use his or her web browser to view the latest information and print it out as required.

Potential costs saved:

1. Fax costs
2. Telephone costs
3. Postage costs
4. Printing and Paper costs
5. Advertising and Promotion costs
6. Market Research costs

Also, since the Internet is a global network, international customers can get the same information as local customers, for no extra cost to you.

3. IMPROVE CUSTOMER SERVICE AND SUPPORT

A website is a great tool for improving the services you offer to your customers. They can place orders online, make bookings, make appointments or browse your product and service information in detail, and at their leisure.

4. WIN NEW CUSTOMERS

By presenting a professional image via your website and showcasing your products and services, potential customers will be more likely to choose you over your competitor. Whether you are selling to other businesses or to individuals, most people now have an Internet connection, and use it to research potential purchases and to comparison shop product prices and features.

5. PROMOTE YOUR BUSINESS IMAGE AND PRODUCTS

A website is a key tool in promoting your business's image and developing brand awareness among potential and existing customers.

You can showcase your business's image, brand, products and services on your website via the following multimedia technologies...

1. Online slideshows
2. High resolution pictures
3. Stereo sound
4. Full motion video

6. FIND OUT MORE ABOUT YOUR CUSTOMERS

By including a customer survey on your website, it is possible to build up a better knowledge about your existing customers, potential customers, and their needs.

7. GAIN ACCESS TO A LARGER MARKET

Even if you are a small business, based in one local area, if you have a niche product or service, which caters for particular needs, you can benefit greatly by opening up your business to a wider area... to the whole state, to the whole country or to the world.

8. GAIN AN ADVANTAGE OVER YOUR COMPETITORS

By offering a professionally designed website to your customers, you are gaining an advantage over competitors whose website may not be up to scratch, or who may not have one.

4. WEBSITE SECURITY

4.1 WHY IS WEBSITE SECURITY AN ISSUE?

Customers viewing a website will only feel confident about making purchases or sending information if the website is secure and its authenticity is beyond doubt. In many websites, private information such as credit card details will need to be transmitted over the Internet and stored in a secure database; therefore a secure connection and secure storage are also needed.

There are also restrictions on what a website's owner can do with any private information collected from a customer, and how it is stored (see Privacy Policy below).

4.2 HOW DO YOU KNOW IF A WEBSITE IS SECURE?

- 1. Secure Connection**
- 2. Authenticity – Server Certificate**
- 3. Secure Storage**
- 4. Business Information and Contact Details**
- 5. Payment options**
- 6. Delivery Information, Warranty and Return Policies**
- 7. Privacy Policy**

1. SECURE CONNECTION

A website can ensure a secure connection by using SSL (Secure Sockets Layer) technology. When a secure connection is established in a web browser, the web address of the website will begin with https:// and a locked padlock icon (or key) will appear in the lower margin of the browser window. During a secure connection, all information going to and from the customer's browser is encrypted using a unique 'session key', making it impossible* to be seen by anyone else on the Internet.

A website which accepts online payments will usually establish a secure connection at the time when the user needs to key in their credit card details, since this is the information which needs to be secured.

* See note on 40-bit certificates below

2. AUTHENTICITY – SERVER CERTIFICATE

If a website has a server certificate, then it means the authenticity of the website has been verified by an independent Certification Authority and a secure connection can take place by using SSL. By clicking on the padlock icon (or key), the customer can view the details of the website's server certificate. Server certificates come in two strengths: 40-bit and 128-bit, with the highest level of protection afforded by the unbreakable 128-bit certificate.

Some examples of Certification Authorities are www.Thawte.com, www.Verisign.com, www.EquifaxSecure.com and www.eSign.com.au.

Security of 40-bit certificates:

It is important to understand that 40-bit server certificates result in the lowest form of security for a secure connection, and it is possible to break this type of encryption. However, it is widely accepted that since it would take considerable computing power and knowledge to break the encryption key, and the gain for the hacker may be just one credit card number, the chances of this happening are extremely low.

3. SECURE STORAGE

Often, a secure website will need some way to store the credit card details and order details, in order to save this information for the website owner to access. This should always be stored on a secure server, which is at least protected by a username and password. A more secure system will only store recent transactions, which are removed when they have been accessed by the website owner. Alternatively, one of the most secure methods is for the website to send the credit card and order details to the website owner via a secure e-mail: this way, the information does not need to be stored anywhere at all.

Note:

All of the major internet credit card scams perpetrated in recent years have been the result of hackers accessing supposedly secure storage: online databases of credit card details, each database often containing thousands of numbers. By limiting the amount of credit card details stored in one place, or not storing any at all, you can greatly improve your website security.

4. BUSINESS INFORMATION AND CONTACT DETAILS

By providing important business details, such as the registered business name, ABN number, postal address, street address, telephone and fax numbers, you are giving the customer more confidence about your business, and they will be more willing to send information to you and make purchases.

5. PAYMENT OPTIONS

The website which accepts online payments should provide clear information about what payment options are available, plus notification of ongoing costs and fees (if any).

6. DELIVERY INFORMATION, WARRANTY AND RETURN POLICIES

A website which accepts online payments for products, must include all of this information. It will give the customer a lot more confidence if your website has provided this information up front, before they place their order. Further details about this topic are set out in the document *Building Consumer Sovereignty in Electronic Commerce – A Best Practice Model For Business* [ISBN 0 642 74024 0], which is available online at www.treasury.gov.au.

7. PRIVACY POLICY

A website which collects any sort of information about customers, such as via an online order form, customer feedback or customer survey page, should tell customers what their policy is in relation to this information. All businesses should respect consumers' privacy when dealing with personal information, and they must comply with the minimum standards set out in the document *National Principles for the Fair Handling of Personal Information*, which is available online at www.privacy.gov.au.

5. ONLINE CREDIT CARD PAYMENTS

5.1 STEPS IN MAKING AN ONLINE PURCHASE

1. On visiting a website and deciding what to buy, the customer is sent to a secure area of the site and asked to enter their credit card details and delivery information.
2. The credit card details must include all of the following: card holder's name, card number and card expiry date.
3. After sending this information, the customer receives a success (or failure) notification message in their browser.
4. An order confirmation email is sent to the customer, showing details of what they have just purchased.

5.2 WHY ARE CREDIT CARDS PAYMENTS SO POPULAR ONLINE?

1. The most popular ones (VISA, MasterCard, Bankcard and American Express) are already in use worldwide by hundreds of millions of people.
2. The customer's financial institution will automatically perform any international currency conversion necessary.
3. It is possible to automatically validate a card using the cardholder's name, card number, and expiry date. This means the process of taking an online order can be fully automated, and fully secure.
4. The credit card company will stand behind you if your card details have been fraudulently used without your knowledge. In such situations, the full amount of the fraudulent purchase will be refunded to you.

5.3 HOW DO ONLINE CREDIT CARD PAYMENTS WORK?

Once a customer has entered their order details and credit card information, it is handled in one of two ways, either by online credit card processing or by offsite credit card processing. Both methods can be made fully secure.

Method 1 - Online credit card processing

This method means that the website makes use of an electronic 'payments gateway' in order to first authorise and then process the credit card transaction. This method is fully automated and is favoured when there is a high volume of transactions. Details of the order and credit card information will also be stored in a secure area, for record keeping purposes.

Method 2 - Offsite credit card processing

The website will either:

1. Save the credit card information and the order details in a secure area, or
2. Send the credit card information and the order details to the website owner via a secure e-mail.

Either way, the owner of the website must access this information in order to process the order in the traditional manner (i.e. by gaining telephone authorisation and completing a voucher, or by using an EFTPOS terminal). This method also allows the website owner to call back the customer to validate a purchase, for added security, in the case of a large transaction.

6. GLOSSARY OF INTERNET TERMS

Applet	A Java program designed to be run over the Internet, without any fear of viruses or other security threats.
Application	A computer program which can be run on a PC. This term can also mean any general software system.
B2B	B usiness to B usiness. In reference to commerce conducted between companies rather than between companies and private individuals or consumers. See also B2C.
B2C	B usiness to C onsumer. This refers to commerce conducted between companies and individuals or consumers. See also B2B.
Bandwidth	How much data you can send through a connection. Measured in bits-per-second (bps), Kbps or Mbps. A full page of English text is about 16,000 bits. A 56Kbps modem can move about 56,000 bits in one second. Full-motion full-screen video would require roughly 10,000,000 bits-per-second (i.e. 10Mbps), depending on the data compression.
bps	bits per second . A measurement of how fast data is moved from one place to another. A 28.8Kbps modem can move about 28,800 bits per second. Kbps = units of one thousand bits per second Mbps = units of one million bits per second Gbps = units of one billion bits per second
CGI	C ommon G ateway I nterface; a programming standard, which enables software programs to run on a web server. These programs are called CGI scripts.
Certification Authority	Also known as a CA. A company which provides a Server Certificate for a website and independently verifies the website's owner. Some companies providing this service are www.Thawte.com , www.Verisign.com , www.EquifaxSecure.com and www.eSign.com.au .
DNS	D omain N ame S ystem; the scheme for translating Internet Protocol (IP) numbers into strings of word segments denoting user names and locations. This is the method by which a website address such as www.webcentro.com.au is translated into an IP number such as 128.123.100.10.
Domain Name	The 'Internet Address' which is assigned to a particular website and web server. A website and email address are the most commonly known services associated with a domain name. Eg. The domain name webcentro.com.au has a website at www.webcentro.com.au and also an email address at info@webcentro.com.au .
Download	The process of getting a file from a remote computer to a local computer (usually a PC).
E-business	See E-commerce
E-commerce	Term describing the use of the Internet to carry out business transactions, such as ordering a product or receiving orders. E-commerce usually refers to online ordering and online shopping

facilities via a website, but technically it can also refer to using just e-mail to send or receive a product order.

FTP	File Transfer Protocol ; the system that allows you to transfer files between computers over the Internet.
HTML	HyperText Markup Language ; the computer language used to construct a web page.
HTTP	HyperText Transfer Protocol ; the computer protocol used to send and receive web pages and information to and from a web browser.
HTTPS	HyperText Transfer Protocol (Secure) ; the secure computer protocol used to send and receive web pages and information to and from a web browser in an encrypted format.
Hyperlink	A highlighted, underlined phrase or word on a Web page that can be clicked to go to another part of the page or to another Web page.
IP Address	Internet Protocol Address ; sometimes IP number or a dotted quad. A unique number consisting of 4 parts separated by dots. E.g. 165.113.245.2 Every computer that is on the Internet has a unique IP number - if a computer does not have an IP number, it is not really on the Internet. Most computers (such as web servers) also have one or more domain names that are easier for people to remember.
ISP	Internet Service Provider ; a company that provides customers with Internet access, via dial-up modem, or by other connection methods.
Java	A computer programming language invented by Sun Microsystems which allows a program to be run on any Operating System, making it ideal for use on the Internet. A Java program designed to be run directly over the Internet is called an Applet.
JavaScript	A computer programming language invented by Netscape, that allows small programs to be embedded within web pages, usually to make the web pages more interactive. Not related to Java.
POP/POP3	Post Office Protocol ; the system for receiving e-mail on the Internet. When you set up an e-mail account, you will be given a POP account name and password, which can be used with your e-mail program to check your e-mail. POP3 refers to the latest specification of POP, which is in widespread use today.
Secure Server	A web server, which has a server certificate assigned to it, and which encrypts all information flowing to and from the user's web browser to ensure the security of all Internet transactions. A secure server will always display a 'Lock' icon in the lower margin of the web browser window and the URL will always begin with 'https' instead of the usual 'http'.
Server Certificate	The globally unique and independently verified certificate, which is used in conjunction with a secure server to provide security for Internet transactions. This is what is displayed when you click on the 'Lock' icon in your web browser: it can be used to verify the authenticity of a website and the business which owns it. A server certificate is purchased from a Certification Authority and must be renewed on a yearly basis. Two types of certificate exist; 40-bit and 128-bit with the 128-bit certificate being the most secure.

SMTP	Simple Mail Transfer Protocol ; the main protocol used to send e-mail on the Internet.
SSH	Secure SHell ; a protocol, designed by Netscape, which allows a user to remotely log into a computer securely. It does this in a similar way to SSL: all data transmitted is encrypted using a unique session key.
SSL	Secure Sockets Layer ; a protocol, designed by Netscape to allow encrypted, authenticated communications across the Internet. When a secure connection is established in a web browser, the web address of the website will begin with https:// and a locked padlock icon (or key) will appear in the lower margin of the browser window. During a secure connection, all information going to and from the customer's browser is encrypted using a unique 'session key'.
Traffic	In relation to web hosting, traffic refers to the amount of data served by the web server for a particular website. This is usually measured in Megabytes per month (MB/month) or Gigabytes per month (GB/month). For example, a website with high traffic (50,000 users) may have traffic of 10 GB/month. A website with low traffic (100 users) may have traffic of just 0.1 GB/month.
Upload	The process of sending a file to a remote computer from a local computer (usually a PC).
URL	Uniform Resource Locator ; the address of a file or location on the Internet. In terms of a website, this may also be known as a web address. For example: http://www.webcentro.com.au is a URL.
W3C	World Wide Web Consortium : the international organization, which develops and specifies standards related to the World Wide Web. Some examples of standards developed by the W3C are HTML, HTTP and XML. They are located at http://www.w3.org .
Web Address	The location of a website. Also known as a Website URL (Uniform Resource Locator).
Web Browser	The program that you can use to view (surf) websites. The two main browsers are Microsoft Internet Explorer and Netscape Navigator.
Web Design	The process of designing pages for display on a website.
Web Development	The general term used to describe the creation of a website.
Web Hosting	A service provided by a Web Hosting Company by which they charge the customer a fee for hosting the customer's website. The website contents are stored on the Web Hosting Company's web server.
Web Page	A single page of a website for display in a web browser window. The page does not have to conform to traditional page sizes, since the user can scroll left and right, up and down. Ideally, a page will be less than three screen heights high and 1 screen width wide.
Web Server	The computer which stores the contents of a website, i.e. it 'serves up' the contents of a website to the user who is using a web browser. A web server is connected permanently to the Internet.
Web Space	Usually refers to the disk size (measured in MB or GB) that a website has been allocated on its web server.

Website	The pages and contents associated with one URL/web address. A website is usually owned by one company or organization.
Website Deployment	The process of putting the contents of a website onto a web server so that it can be seen by the outside world.
Website Marketing	The process of promoting a website. This can include traditional techniques such as print media and TV/Radio, as well as Internet based techniques such as directory listings, search engine listings, banner advertisements, sponsored links, affiliate programs, and click-throughs.
XML	e X tensible M arkup L anguage was developed by the W3C and is used for defining data elements on a Web page and business-to-business documents. XML has a similar structure to HTML but whereas HTML defines how elements are displayed, XML defines what those elements contain. By providing a common method for identifying data, XML is expected to become the dominant format for the exchange of electronic data.

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