

entlevel limited

e-Business consultants

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e-COMMERCE

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DEFINING e-COMMERCE

e-commerce is basically the conduct of any form of business trading process over a telecommunications link. Some 20 years ago its first form, "EDI" (electronic data interchange), was developed to support various manufacturing and the food retail industries. It has now been developed to operate over the Internet, where 2 distinct forms are generally recognised:-

- Business-to-Consumer (B2C) – usually with credit card payments
- Business-to-Business (B2B) – which needs credit terms, discounts, etc.

WHY TRADE ELECTRONICALLY?

The key reasons are to extend the geographic coverage of your business, make it available to customers at all hours, to make your business more efficient and above all to meet the demands of your customers for simplified trading processes.

WHO DO YOU TRADE WITH?

Before deciding how to embark on e-commerce, it is important to identify the type of customer you deal with – regular business customers, business customers who "walk in off the street", consumers, regular private customers, etc. You also need to estimate the volume of electronic transactions you expect to handle. This will determine the structure of your systems and also the wording of your web site, as discussed later.

WEB SITES

There are several stages in the development of a web site:-

- The simplest web site just acts as a place-marker for your company, with contact details (email, phone, fax, mail) and an outline of the products you offer.
- The next stage is to offer an online catalogue but with offline ordering (mail, phone or fax).
- There are now a range of "shopping cart" systems available to link into your site so that you can take orders and collect credit card payments over the net.
- To ensure stock levels, current prices, discounts, etc. are factored into what is offered, the next stage involves linking the web site into the back-office systems (sales ledger, stock list, accounts, etc.). This is an integrated web site.
- A further extension allows suppliers access to your stock levels, order pipelines, etc. so that they can forecast your demand for their products. This is beginning to create a true "e-Business".

CUSTOMERS

Web users are incredibly impatient and if your site is slow to reveal its start page, customers will not even begin to use it but seek an alternative supplier. Once in, if responses are slow they will, for example, re-click buttons such as “Order now” and create duplicate orders they did not intend which you then have to detect and remove. So it is vital to design a fast, clear site and not be seduced by artistic designs that work fast enough in the laboratory but not over the network.

You must give your customers the assurance that they can contact you – at very least a telephone number for contact as well as an email address. It is essential that emails are acknowledged and orders processed in a short period of time.

The ultimate test of “electronic customer relationship management” (eCRM) is whether an electronic order can be placed and a follow-up telephone call then be made to a person who can locate and adjust the electronic order. Only a few companies can handle this at present.

ONLINE CONTRACTS

A web site, like a paper catalogue, will describe the products and invite the customer to make an offer to purchase. A contractual relationship exists once such an offer is accepted by the supplier. A web site should be designed to avoid inadvertently creating a contract – it will need wording in accordance with consumer or commercial law, depending on the type of customer you deal with.

With the speed of the Internet it is all too easy to create a situation wherein a contract is created without first checking that there is sufficient stock to fulfil the contract, as this could lead to a law suit. For this reason, integrated web sites and business systems are recommended.

The global nature of the web also exposes you to the risk of creating a contract under the terms of overseas law, or a contract to sell into a territory where (perhaps for franchise reasons, or even local government restrictions) you are barred from selling. The only safe advice is “consult your lawyer” at an early stage.

SECURITY

The concern most often expressed is that credit card details may be intercepted as they cross the Internet, allowing someone to “clone” the card and make unauthorised purchases. The SSL (Secure Sockets Layer) “padlock on the browser” ensures that these details are encrypted, making interception virtually impossible. However, a more real threat exists once the customer data is stored inside company web sites. It is important to ensure that both encryption and firewall technologies are used to prevent hackers from breaking in to steal or even alter data.

Similar encryption precautions should be taken by anyone carrying a laptop with confidential or personal data stored on it, as recent high profile stories concerning military personnel have illustrated.

Since the Electronic Communications Act 2000, Digital Signatures have been legally recognised in the UK. These rely on public and private electronic “keys” issued as part of a Digital Certificate, with appropriate encryption technology. The certificate is issued by any one of a number of “Certification Authorities” via Registration Authorities who check the credentials of the applicant. Whilst some \$9.99 certificates simply attest to the existence of the applicant’s email address, others rely on more rigorous checks (eg by Chambers of Commerce in the ChamberSign scheme). Businesses will become familiar with these over the coming months as emails, web sites and trade documents begin to appear with digital signatures.

PAYMENTS

Whilst business payments are usually managed via BACS transfers, consumer purchases are based on credit cards. When opening a web “shop” it is necessary to have access to a merchant account

to clear credit card transactions. Many small businesses rely on third-party Payment Processors to do this.

TECHNOLOGY TRENDS

New technologies are arriving all the time. At present we are seeing the arrival of interactive digital television with consumer shopping options, including access to the Internet. This will provide access to e-commerce for the many consumers without a PC at home.

The use of "mobile Internet" devices, despite the early consumer disappointment with WAP, will undoubtedly take off during 2001-2002, probably first for business-to-business purposes. The "3rd Generation" mobiles due in 2003 will also offer the possibility of moving colour images, so a whole range of new applications are being dreamed up.

The arrival of "unmetered Internet" via broadband telecommunications links (eg ADSL) will trigger a move of software functionality into the network during 2002-2003. This is called "Applications Service Provision" (ASP) and is being strongly promoted by Microsoft (as ".NET") and other suppliers, particularly of accounting software. The advantage to users is that updates are automatic and they only pay for functions actually needed.

AN e-COMMERCE CHECKLIST

Whilst for most people the first concern is just the design of the company web site, here are some of the basic questions you need to address when updating to "e-business" – we would be pleased to assist you to evaluate your answers to these.

- Who is responsible for deciding what the web site will do?
- Who will design it and who will approve it?
- How do you ensure your site meets your legal requirements and obligations?
- Who will maintain it and keep it up to date? An out of date web site implies that no-one is in charge.
- How do you ensure your site works all the time? Could large numbers of customers overload it?
- How will your customers find your site? Will it be a good experience for them?
- How will you track your customers?
- How do you link the web site into existing business processes and systems? How can it help improve your supply chain?
- How will you display an up to date electronic catalogue of your products on your web site?
- How will discounts be offered to your account customers?
- How will payments be organised, for both credit card retail purchases and for account customers?
- How will you link your web site into your stock and delivery system, preventing orders being taken for items no longer available?
- Could anyone break into your site? Is customer and financial data safe?
- Does your site have a Digital Signature to show it is genuine?
- Can you check your customers' Digital Signatures?

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If you would like to discuss the issues that will emerge when answering these questions, please contact Entrelevel Limited on 01473-407347 or by email at info@entrelevel.co.uk

We are purely e-commerce strategy advisors and do not develop web sites, supply software, etc. We can thus give unbiased advice about your requirements and how to meet them.

We will be pleased to help you plan your e-commerce strategy and help you select the suppliers needed to implement your plans.