

The E-Business Glossary

A

ActiveX

Microsoft's open technology platform, comprising a set of object-oriented programming technologies and tools, that enables developers to build interactive e-commerce applications. ActiveX is Microsoft's answer to the Java technology from Sun Microsystems. An ActiveX control is roughly equivalent to a Java applet.

ADSL (Asymmetric Digital Subscriber Line)

A standard for providing high bandwidth data and voice connection through existing copper telephone wires. It provides fast Internet connection to homes and small businesses. It is asymmetric in that it uses most of the channel to transmit downstream to the user and only a small part to receive information from the user. Downstream rates are typically between 512 kilobits per second to about 6 megabits per second. This makes it particularly attractive for applications where customers expect to receive more data than they transmit, such as web access and the reception of digital audio-visual material.

Agent

A type of software program that is instructed to go out onto the Internet and perform a requested function on behalf of the user. Examples include identifying specific updates on web sites or searching for specified information (for example the lowest price on something you want to buy such as a book).

Applet

Small applications, written in Java, that are intended for use within a web browser and cannot be run as stand alone applications. Typically applets extend the capabilities of the browser or provide web site-specific functionality. All up-to-date web browsers contain Java interpreters, which enable web sites to use applets in a very flexible fashion. Many web site designers extend the impact of their sites by adding such applets.

ASP (Active Server Page)

A scripting language for programming a web site, where the programming is executed by the web server and not the browser. This gives increased performance and allows for the creation of dynamic forms which can return informative feedback to the web site visitor as well as enabling the site to be customised depending upon who is viewing it.

ASP (Application Service Provider)

A company that provides software application capabilities to individuals or enterprises on a rental basis according to a service level agreement. The service is delivered on a one-to-many basis via a wide area network, usually an IP network. The ASP model can be differentiated from the facilities management model in that the ASP never operates on the client's premises; services are provided remotely and accessed online. The cost effectiveness of the ASP model is best highlighted where it delivers a custom business solution that meets the shared requirements of a set of

customers operating in a particular industry sector and is able, therefore, to provide a solution that is less expensive than a one-to-one customised solution.

Attachment

File attached to an e-mail that may contain text, spreadsheets, audio data, pictures, animated graphics and video. Attachments should be encrypted in order to avoid viruses. Equally the use of e-mail attachments is a favoured method of maliciously spreading viruses. However it is not possible to be infected simply by reading a plain text e-mail, so good security policies should educate employees against opening attachments to unexpected mail items, or mail items on unexpected topics, whatever their apparent source.

B

Bandwidth

Describes the amount of data that can travel through the Internet or a communications network in a specific period of time. This is usually measured in the amounts of data per second (e.g. megabits per second).

Banner

Space on a web page used for advertisements by third parties. These are the long thin boxes with an advertising message in them. The majority are clickable - by clicking on them you are taken through to the advertiser's site. These are known as click throughs.

Bluetooth

A technology which provides a short, reasonably capacious link between say, a mobile phone and a laptop. It is similar to the infrared links that already exist but it is not directional, is capable of discovering other Bluetooth devices and is able to automatically create small wireless LANs. The reach is about 10 metres. It is already included as part of the first Ericsson GPRS phone and many laptop suppliers are committed to its incorporation. It has many business applications, ranging from simple file transfer between PCs, to distribution of a slide show to all the members of a meeting, to wireless rail ticketing.

Brochureware

The act of putting a company's corporate literature in basic static form directly on to a web site. Because of the lack of any interaction with the visitor and the fact that the content has not been originally designed specifically for display on the web, it is generally not well received by visitors and is criticised by web designers.

C

CA (Certification Authority)

A trusted entity that confirms that the private key received as part of a digital signature does in fact belong to the person who is claiming to have signed it. The CA confirms this fact by signing a Public Key Certificate with the associated public key. The degree to which you trust the CA to underwrite information prior to certification will define the risk to you of accepting the associated signature. Thus an internal CA

for use by trusted employees is totally within your control (even if it is outsourced as a service). B2B companies are increasingly creating closed groups, where members establish mutual trust by signing legal terms for use of specific CAs within the group. B2C companies are most at risk as customers can present certificates from anywhere internationally, and the associated CA may be unknown to you.

CCITT (Consultative Committee on International Telegraph and Telephone)

An international standards organisation that issues recommendations and standards for communications. It is now known as the ITU-T (International Telecommunications Union - Telecommunications) Telecommunications Standardisation Sector.

CGI (Common Gateway Interface)

A standard that describes how a web browser passes on information to a web server. CGI programs are able to read the information, process it and pass the results back to the web browser. The two most common uses for CGI are to facilitate the use of forms for data entry and to link a web server to a database. The most common programming language for CGI is PERL.

Click through

The rate at which viewers of a web page click on a banner advertisement and are transferred to the advertiser's web site. Typically the advertiser will pay the host of the web page an agreed fee for each click through.

Compression

A method by which data of any type is scaled down in size, eventually consuming less space for storage and requiring a narrower bandwidth for transmission (without any subsequent loss of information). Data compression techniques have played an important role in the development of e-commerce, with the increasing need to transmit large volumes of data (in particular image and video data) to web users where there are limitations on the bandwidth available.

Compound document

A document that may integrate different document types and media types which emanate from different sources.

Cookies

Files downloaded from a web server to the PC of a visitor to a web site. They can be retrieved by the server that placed the information there. The text file that is created contains information on the user's preferences. In addition, cookies can also save information such as the date that the web site was visited, what purchases were made, what files were downloaded and the information viewed.

CRM (Customer Relationship Management)

An information industry term for the overall strategy, incorporating methodologies, software, and Internet capabilities, that helps a company manage customer relationships in an organised way. For example, a company might build a customer database that enables its marketing department to identify and target their best customers, manage marketing campaigns with clear goals and objectives, and generate quality leads for the sales team. Subsets of the same data might assist in the

formation of personalised relationships with customers, with the aim of improving customer satisfaction and maximising profits. Identifying the most profitable customers and providing them the highest level of service is at the core of CRM.

Cryptography

Greek word meaning "hidden writing". It is the name given to the science of scrambling data in such a way that renders it totally unintelligible to the unauthorised viewer, but which enables the intended recipient to unscramble it sensibly. In the e-commerce world it is typically used to protect data as it travels along communications links between different systems.

CTI (Computer Telephony Integration)

The integration of voice and data networks and their associated applications. An example of its use within the e-commerce world is the integration of a web site with a call centre. This would enable a call centre agent to provide further information to the web site visitor or help them complete a transaction if they are experiencing problems.

Cybersquatting

Term used to describe the situation where domain names reflecting recognised brands are registered by someone else in order for them to be sold off at a later date to the brand owner for a profit.

D

DES (Data Encryption Standard)

An encryption algorithm widely used in e-commerce security solutions. The original algorithm has 56 keys and can be cracked, which has resulted in the development of Triple DES which has a 128-bit key and is at present unbreakable.

DHTML (Dynamic Hypertext Markup Language)

An extension to HTML, which allows a better user interaction and introduces dynamic web page creation. This enables web designers to create dynamic multimedia applications through the use of JavaScript and Cascading Style Sheets. It is of particular use in enabling the web site visitor to read the text on screen while the pictures or animation are building up. However many web designers have little knowledge in this area and therefore tend to use traditional multimedia tools such as Macromedia's Director or Flash.

Digital cash

Electronic cash residing in an electronic wallet or purse. The transfers from a credit card or bank account can fill up the wallet or purse. When the customer uses digital cash their funds go into merchants wallets.

Digital certificate

A document signed with a digital signature by a Certification Authority which acts as electronic proof of identity by confirming that the holder of a specified public key is actually who they claim to be.

Digital signature

An electronic signature that can be used to authenticate the identity of the sender of a message or the signer of a document, and also ensure that the original content of the

message or document that has been sent is unchanged. Digital signatures are easily transportable, cannot be imitated by someone else, and can be automatically time-stamped. The ability to ensure that the original signed message arrived means that the sender cannot easily repudiate it later. A digital signature can be used with any kind of message, whether it is encrypted or not, simply so that the receiver can be sure of the sender's identity. A digital certificate contains the digital signature of the Certification Authority so that the recipient can verify that the certificate is real.

Disintermediation

The process of a company getting closer to its customers by cutting out the middleman. The middleman may well be an existing distribution channel, but equally it could be a time element (where, for example, e-commerce takes away the critical element of only being able to purchase specific goods during conventional shopping hours). Equally it could be a "people" saving, for example where customers are able to make their own bookings, reservations and purchases via the web without the need for any intervention or assistance by a booking or sales agent.

Domain name

The name of a computer connected to the Internet. The domain name is used to form the URL. The domain names are assigned by specific institutions in each country.

Domain suffix

Designates on what network a specific domain name resides. For example .com refers to corporations, .org refers to non-profit organisations, whilst .uk typically refers to a UK company or a company predominantly trading in the UK.

Download

The process by which visitors to a web site access and save or pull down software or other files to their own computer from the web server, usually via a modem.

DRM (Digital Rights Management)

Technology aimed at helping content owners distribute material (which can be text, images, audio, video or code) electronically on the Internet by addressing problems of unauthorised copying, modification and distribution. DRM systems provide content owners with the ability to protect and manage their digital assets by tracking distribution and providing the capability to enforce and negotiate user restrictions.

E

eBIS-XML

Interface developed by the Business and Accounting Software Developers Association (BASDA). Using XML technology, it was designed as a simple easy to use, many to many interface which will work with any business financial system, based on series of international standard business document formats. These provide the user with the ability to transmit a message over the Internet to another application as well as viewing it as a document through a web browser. Software using the eBIS-XML messages ensures that orders or invoices can be generated and sent electronically from one business systems to another. Once received, the business document can be displayed or printed out as a hard copy.

e-catalogue

An electronic version of the traditional paper catalogue. Originally e-catalogues were distributed on CD-ROM (with up to 100,000 products capable of being stored on a single CD) but increasingly the e-catalogue forms an integral part of a company's online e-commerce presence. Typically the software will provide a menu driven database program that enables the user to locate products by product code, description, page number or index. Ordering facilities are integrated so that the whole purchasing process can be completed online.

EDI (Electronic Data Interchange)

The transfer of structured business data (such as orders and invoices) by agreed message standards, from one computer to another, by electronic means. Standards were agreed before Internet activities were established in a business context and so formed the forerunner of today's business to business e-commerce. Some of the EDI standards and systems have been upgraded for use on the Internet - particularly in the area of XML/EDI.

e-marketplace

A virtual online market where buyers, suppliers, distributors and sellers find and exchange information, conduct trade and collaborate with each other.

e-procurement

The automation of the procurement activity within an organisation. This can limited to the purchase of items from some form of online catalogue, or extended to the sourcing of potential suppliers for subsequent tendering and awarding of contracts. In either case the full range of documentation including quotation or tendering requests, purchase orders, acknowledgements, shipping notices, invoices and payments can be processed electronically.

e-tailing

Online sales of retail-style goods. Many consumer and specialist goods are now available via such web sites, though many were also amongst the first victims of the dot com downturn.

Extranet

Making an intranet accessible for selected external partners (such as trading partners, members of working parties etc) for exchanging data and applications and sharing specific business information. The users of the extranet are a well defined group and access is protected by rigorous identification routines and security features.

e-zine

Online publication in the form of newsletters or magazines that allow for a new way of communication and interaction to occur on the Internet. Many e-zines were developed specifically as web-only publications, whilst others have emerged out of traditional publications.

F

FAQ's (Frequently asked questions)

Online document that provides visitors to a web site with a summary of questions and associated answers that are regularly asked about the site or the products/services that the owner of the site provides.

Firewall

A hardware or software security device that filters information passing between internal and external networks. Usually run on a specific server, it controls access to the Internet by internal users, and prevents outside parties gaining access to systems and information on the internal network. In particular it protects the internal network from intruders or hackers who might try to use the Internet as a means of breaking into those systems.

Fulfilment

An element of the e-commerce supply chain that picks, packs and ships orders to customers.

G

Gateway

Architecture for bridging the gap between two otherwise incompatible applications or networks, working with different protocols, so that data can be transferred.

GSM (Global System for Mobile communications)

A digital cellular telephone system that was developed in Europe and has since become a global standard. Launched in 1991, it achieved 100 million users in 1997, 250 million by the end of the last century and is set to reach one billion by 2003. Already, in many countries there are more mobiles than fixed telephone lines.

H

Hosting

Hosting is the business of housing, serving, and maintaining files for a web site or a secure server for an e-commerce site. A critical element in any hosting solution is a fast connection to the Internet. Whilst this can prove expensive for an individual business hosting its own site, using a hosting service lets many companies share the cost of a fast Internet connection for serving files. This, together with the cost of providing security, database and administration functions, has led to a variety of different external hosting solutions. ISPs offer a number of standard packages, some of which include free space for a web site. However they can be basic and may not cater well for specialised needs. More sophisticated solutions are available from Application Service Providers who are capable of providing a hosting service, data management and the application in a single package.

HTML (Hypertext Markup Language)

The fundamental building block of the World Wide Web and a formal recommendation by the World Wide Web Consortium (WC3). HTML is the set of markup symbols or codes inserted in a file intended for display on a World Wide Web

browser page. The markup tells the web browser how to display a web page's words and images for the user. Each individual markup code is commonly referred to as a tag. Some elements come in pairs that indicate when a display effect is to begin and when it is to end. Non-graphical HTML can be created by text editors such as Microsoft Word, though graphical HTML documents require a more sophisticated editor.

HTTP (HyperText Transfer Protocol)

The protocol used to transmit HTML files over the Internet. Usually indicated in the web browser as *http://*

HTTPS

The secure version of HTTP. The URL line on the web will usually change to *https//* when secure details such as credit card information is presented. This usually accompanies the padlock symbol on the bottom right of the web browser status display.

Hyperlink

An electronic link that can be programmed so that it is possible to jump from one document or web page to another. Hyperlinks rapidly gained prominence as being the primary tools for navigating the Internet.

Hypertext

A way of presenting information, usually accessed via a browser, in which text, sounds, images and actions are linked together in a way that allows the user to jump between them in whatever order is chosen.

I

ICANN (Internet Corporation for Assigned Names and Numbers)

A non-profit corporation that was formed to assume responsibility for the IP address space allocation, protocol parameter assignment, domain name system management, and root server system management functions previously performed under U.S. Government contract by IANA and other entities.

Internet2

Internet2 is a collaborative effort by over 180 U.S. universities to develop advanced Internet technology and applications vital to the research and education missions of higher education. Among the applications Internet2 members say they hope to see are digital libraries featuring streaming high-fidelity audio and video content, collaboration environments that encompass virtual laboratory support, remote instrumentation, interactivity, and tele-medicine, including remote diagnosis and monitoring. Whilst primarily aimed at the requirements of educational institutions, the technology being developed for Internet2 is expected to be 100 to 1000 times faster than the current Internet infrastructure and will subsequently be utilised for commercial purposes.

Intranet

Private company networks that use the same underlying architecture and network protocols as the Internet. They run over a private internal network and are protected

from unauthorised users by a firewall. Without the firewall unauthorised users could gain access via the Internet, since both are connected via a common gateway. Because they offer broad bandwidth they enable users to search for, retrieve and publish information far more quickly than over the Internet. Their primary role is to enable users to search their own company's world wide knowledge and information store from their own desktop, regardless of location.

IP telephony

Refers to the use of an internet protocol (IP) network for carrying voice calls, fax or e-mail messages. This may be as part of a private IP network or over the Internet.

IRC (Internet Relay Chat)

A protocol that allows two or more users to type messages which appear on each other's screens in close to real time. If multiple users log into a "chat room" they have access to other users' handles (names) so they can direct messages to them.

ISDN (Integrated Services Digital Network)

A high capacity telephone network where all information is transmitted in digital format, thus removing the need for a modem. The standard bandwidth is 64 kilobits per second, but higher bandwidth is possible depending upon local implementations. Its speed, combined with the ability to handle digital information, make it a popular choice for supplying fast Internet connection to homes and small businesses.

ISO (International Organisation for Standardisation)

International standards making body, based in Geneva, Switzerland, probably best known for its work in the data communications area where it developed the internationally recognised seven layer network model called the Open Systems Interconnection (OSI) Reference Model. It is also actively involved in establishing standards in optics, image processing and video. It sponsors both JPEG and MPEG.

ISP (Internet Service Provider)

A company that provides access to the Internet for businesses or private individuals. ISPs that are accessed by modem and telephone are often called dial-up services.

J

Java

Developed by Sun Microsystems, Java is a programming language expressly designed for use in the distributed environment of the Internet. It was designed to have the "look and feel" of the C++ language, but it is simpler to use than C++ and enforces an object-oriented programming model. Java can be used to create complete applications that may run on a single computer or be distributed among servers and clients in a network. It can also be used to build a small application module or applet for use as part of a web page. Applets make it possible for a web page user to interact with the page.

JavaScript

Netscape's cross-platform object based scripting language for client and server applications (despite the fact that it sounds similar to Java there is only a partial relationship between the two languages). It can be used to create client side

applications that run inside a browser, or server side applications that are hosted by the web server. JavaScript can also be used to create dynamic HTML pages that accept user input and store data, perhaps using a relational database.

JIT (Just In Time) manufacturing

Tight integration of the supply chain, enabling the buying organisation to achieve significant reductions in the levels of stock held.

JPEG (Joint Photographic Experts Group)

An internationally agreed standard for still-image compression and decompression that was devised by the JPEG, a specialist group set up by the ISO and CCITT. It is particularly effective in compressing realistic images such as photographs, allowing for compression rates of up to 20:1 without visible loss in quality.

L

Legacy systems

Usually refers to existing mainframe systems that an organisation already has in place. The programming skills required to maintain and operate these systems, such as DB2, Cics and Cobol, are known as legacy skills. They are still important in many organisations in view of the requirement to integrate legacy systems with the emerging e-commerce systems.

M

Merchant server

A server configured for electronic commerce. It provides services such as acting as an interface between the trader's bank and the Internet, enabling traders to set up merchant credit card agreements and providing secure software and hosting services. There are also third party merchant services which offer their own special merchant credit card agreement and can take credit card payments on behalf of other traders, acting as a bureau service and taking a commission from each transaction.

Micropayment

Online transactions for amounts as low as one US cent, or even lower. They can be used for billing systems for banks, financial institutions and telecom companies, but the main demand is from content and entertainment providers who might want to charge, for example, per image viewing from a photo library or per minute on online gambling.

MIME (Multipurpose Internet Mail Extension)

An Internet protocol that allows the user to send binary files across the Internet as attachments to e-mail messages. These files include spreadsheets, audio data, pictures, animated graphics and video.

Mirror sites

Web sites that contain exact copies of the original site. They are used to spread the load, particularly where the volume of visitors is likely to cause problems with the

downloading of files. By placing a number of servers nearer to large visitor populations they are able to speed up the downloading.

Mobile commerce

The delivery of electronic commerce capabilities directly into the consumer's hands, anywhere, via the use of wireless networks. Increasingly the emphasis is on providing personalised services to the user, typically based upon their location. So, for example, on arrival at a railway station the user might wish to be provided with details of hotels rooms and restaurants within a two mile radius.

MPEG (Moving Pictures Experts Group)

An industry committee that is developing a set of compression standards for moving images (i.e. film, video and animation) that can be downloaded and viewed on a computer.

O

OBI (Open Buying on the Internet)

A standard built around a common set of business requirements and supporting technical architecture, specifications and guidelines. The intention is to create a standard that will enable companies to integrate their various e-commerce applications.

OCR (Optical Character Recognition)

A means of identifying text characters in a digitised image. Now commonly used in organisations to extract data from printed documents for further processing or electronic archiving.

P

Page impression

A unit of measurement used for banner advertisement. Each unique visitor who views a page on which a specific advert is located is counted as a one page impression. Total page impressions, therefore, are the total number of visitors who land on a particular web page within a site. Advertisers will agree to pay a rate based upon the number of page impressions, though the more popular model has tended to be based upon click throughs.

Penetration testing

Refers to the use of "tiger teams" or groups of ethical hackers that an organisation can hire to perform a variety of tests on the security of their network. The intention is to identify any potential vulnerabilities in the security of the network (including those that could be exploited by any Denial of Service attacks) before a potential hacker is able to do so.

PGP (Pretty Good Privacy)

An e-mail security program. It is available free of charge on the Internet and works on a variety of platforms. It uses public key cryptography and gives users privacy and

authentication. Since it was introduced in 1991 it has become somewhat of a standard for encryption on the Internet, largely because of its availability.

PKI (Public Key Infrastructure)

The application of public key technology in e-commerce to help identify people and secure transactions. This uses cryptography to support a variety of functions, including: the ability to confirm the identity of an individual or company as established by an intermediary (the Certification Authority) trusted by your company; the ability to prove that a transaction originated with that individual or company, so it cannot subsequently be denied (often called non-repudiation); the ability to seal data, such as transactions, to prevent the contents being altered; and the ability to encrypt data to prevent it being seen by unauthorised people.

POP (Point of Presence)

The telephone exchange from which the services of an ISP can be accessed. In regions with good coverage the POPs should be distributed in such a way that all customers can dial in and gain Internet access with a local call.

Portal

A web site that acts as a gateway and starting point to access the WWW. Examples of large industry-wide portals include AltaVista, AOL, Lycos and Yahoo, with the typical services offered being directories of web sites, facilities to search for other sites, news, weather information, stock quotes and online shopping. There are also B2B portals that address specific business groups or communities and which commonly facilitate business transactions between the member organisations.

PPTP (Point To Point Tunnelling)

A standard protocol, sponsored by Microsoft, that allows organisations to extend their own corporate network through private "tunnels" over the public Internet. Effectively an organisation uses a wide area network as a single local area network. An organisation no longer needs to lease its own lines for wide area communication but can securely use the public networks. This kind of interconnection is known as a Virtual Private Network.

Private key

A secret value used in public key cryptography for deciphering a message enciphered by a public key, or for enciphering a message to be deciphered by a public key.

Public key

A publicly known value used in public key cryptography for deciphering a message enciphered by a private key or for enciphering a message to be deciphered by a private key.

Pull technology

The type of technology used on the Internet where visitors to web sites search for and request information for subsequent downloading to their computer.

Push technology

Technology that enables information to be delivered from the web site to the customer. Typical examples include where the customer wants to be updated with

new content on the server and registers for information, or where the customer receives content updates regularly and automatically. This contrasts with pull technology where the user initiates the downloading of content.

R

Registration Authority

A component of Public Key Infrastructure that verifies requests from its customers for a digital certificate through the provision of a trusted link to a Certification Authority, with whom they can register to obtain the certificate.

Repositories

In e-business terms this is a component of Public Key Infrastructure, that holds signed documents and other items securely for preservation over long time periods.

Router

A device that connects two similar networks having the same network protocol. It operates at the network layer and forwards packets based upon their network layer address. It also chooses the best route between two networks when there are multiple paths between them. In e-commerce terms it will select the best physical connection to the server where a web site is stored

S

Search engine

A software tool that creates indexes of web sites based upon their titles, key words or the full text of files. The search engine has an interface that allows the user to key in specific search terms and then presents them with a list of those web addresses that meet the specified requirement. The list is presented in hypertext form which means that the user can click on any item in the list and go directly to that web site.

Server

The hardware on which a web site is stored. Servers can be accessed remotely, via routers, in order to view the contents of the web site. Also the maintenance of the web site can be undertaken remotely. The software for the administration of the web site also constitutes part of the server.

SET (Secure Electronic Transaction)

A standard for secure transactions developed by industry giants such as Visa, MasterCard, Microsoft and IBM. The customer sets up a valid account and then receives a digital certificate validating their identity. Similarly merchants also need to be certified, being issued with a digital certificate as part of their agreement. Once the price and product information are processed, the merchant verifies the customer's digital signature and sends the order to the bank with its own certificate and payment information. At the end of the process the bank verifies the merchant's signature and payment component of the message and then authorises payment so the merchant can fulfil the order.

Set top box

Device connected to (or increasingly integrated with) a television set to provide additional cable, satellite or Internet services.

SGML (Standard Generalised Markup Language)

An internationally agreed language intended for implementing formatting information in documents. XML is a direct descendent of SGML in that it is used to describe computer data in a standard way.

Shareware

Software that is made available to users, by the developers, at no costs. Manufacturers of shareware may ask users to review the applications as part of the agreement, often as the prelude to a commercial launch of the product. Others use the concept to gain a wide user base that can be exploited at a later date when a new version of the software, or a related product, is made commercially available.

Shopping cart (or basket)

Software that facilitates easy selection and payment for multiple products purchased by a customer from an e-commerce web site. The analogy with the supermarket shopping trolley is intended to make the selection and purchasing of goods as intuitive as possible.

Site analysis tool

A piece of software that enables the owner of a web site to measure the usage patterns of the site. It does this in terms of statistics such as the number of visitors, the number of new visitors, if visitors are returning, which search engines they are finding the site through, and which parts of the site they are making particular use of.

Spamming

Sending out large untargeted and unsolicited mailings via e-mail, advertising goods or services. This is generally considered to be bad business practice.

SSI (Server Side Includes)

Commands that are included into HTML pages and are executed before the web page is sent to the client. The commands are special kinds of HTML tags that are interpreted by the web server. They offer a simple way of customising a page, for example by defining a variable that is replaced by the name of the site visitor (identified by IP address, login/password, or via a cookie). This would enable every single visitor to be welcomed to the site individually without the need for different web pages on the server.

SSL (Secure Socket Layers)

A protocol designed to provide privacy between a web client and a web server. The protocol begins with a handshake phase that negotiates an encryption algorithm and keys, and authenticates the server to the client. Once the handshake is complete and the transmission of data begins, all data is encrypted using the keys negotiated during the handshake.

Supply chain

The linking of activities such as design, procurement, manufacture, inventory management, warehousing and transportation between business partners in order to manage the flow of goods and information from the point of design to the delivery of the product or service to the end customer.

SWIFT (Society for Worldwide Interbank Financial Telecommunication)

A bank-owned co-operative that supplies secure messaging services and interface software to over 7000 financial institutions in 194 countries. It carried 1.2 billion messages in 2000. The average daily value of payment messages on SWIFT is estimated to be above USD 5 trillion.

T

TCP/IP (Transmission Control Protocol/Internet Protocol)

Protocol governing communications between all computers on the Internet. TCP/IP is a set of instructions that dictates how packets of information are sent across multiple networks. Also included is a built-in error-checking capability to ensure that data packets arrive at their final destination in the proper order.

Trojan Horse

A program that appears to be legitimate but actually contains another program or block of undesired malicious, destructive code, deliberately disguised and intentionally hidden in a block of desirable code. The Trojan Horse program is not itself a virus but a vehicle in which viruses can be concealed.

Trusted Third Party

An entity that provides one or more of the services in which you place your trust as part of the Public Key Infrastructure, the bedrock security infrastructure for doing global electronic commerce. This may include, for example, acting as a Certification Authority, Registration Authority or Secure Repository.

U

UMTS (Universal Mobile Telecommunications Service)

A third generation GSM-based service integrating wired and wireless technologies and increasing data transmission rates. UMTS will offer location services, broadcast services and a variety of quality levels upon which to build a range of applications. It is therefore not just a mobile voice system which can also offer some data services, it is a flexible mobile data system that can also offer voice. So the terminal is unlikely to be a simple phone.

URL (Uniform Resource Locator)

The standard form for addresses on the Internet. Each URL is a globally unique address within the entirety of the Internet.

V

VANs (Value Added Data Networks)

VANs offer an alternative to building networks by leasing circuits from common carriers. VANs provide additional services over and above those normally provided by common carriers, such as network management, e-mail, EDI, standardisation and security features. Within the e-commerce arena VANs have played a particularly significant role in the way in which they have provided trading partners within specific trading communities with electronic post boxes and then collected and distributed EDI electronic envelopes. They provide security to ensure the safety and integrity of transactions, and charge an annual subscription fee, plus a usage fee for their services.

Virtual team

A group of people brought together electronically to work on a problem or project, working remotely from their separate locations and organisations.

Virus

A special kind of computer program capable of reproducing itself in systems other than the one on which it was created. It spreads across disks and networks by making copies of itself. As it spreads it is said to be infecting the system. It always requires a trigger or external request for execution, and when executed it can produce a range of side effects including serious corruption and destruction in the computers in which it is active.

VoIP (Voice over IP)

The ability and process of carrying voice over an IP network. One of the main drivers is the fact that data traffic is overtaking voice traffic, so utilising packet networks for voice and data is becoming increasingly attractive. Call centres are already making use of VoIP to enable the web site visitor to contact them directly from a web page.

VPN (Virtual Private Network)

A VPN is a private data network that makes use of the public telecommunications infrastructure. VPNs maintain privacy through the use of tunneling protocol (which provides a secure point to point "tunnel" for data transfer) and other security procedures, particularly data encryption.

W

W3C (World Wide Web Consortium)

Created in 1994 to develop common protocols for use on the web and to ensure interoperability. It currently has around 480 member organisations from around the world, drawn from the IT industry and public and private sector organisations through to academic institutions and user associations.

WAP (Wireless Application Protocol)

An open global specification that enables mobile users with wireless devices to access web-based information and services. The types of devices that will use WAP are handheld wireless devices such as mobile phones, pagers and two-way radios.

Because it was designed for small devices with low specifications, WAP presents the end user with text information only, thereby speeding up the downloads.

X

X.400/X.500

X.400 is a set of seven standards that define how e-mail is to be processed by user agents and mail transfer agents. It defines what is in an electronic address and what the electronic envelope should look like. X.500 is a subsequent standard that acts as the directory service for X.400 mail users. However there are few standard application software packages that conform to X.500, making widespread use problematic.

XML (eXtensible Markup Language)

A standard for data formats that is greatly facilitating the growth of e-commerce. It is designed to enable different computer programs, including business software packages, to share and process data. XML uses a tag system, where words enclosed in parantheses are used to describe the elements of a document. However, unlike HTML, these tags are extensible and hence unlimited and self-defining. This enables companies or trading communities, wishing to exchange business information, to agree upon a standard or common way to describe, for example, individual products and elements. This exchange of information can then take place irrespective of the different software or hardware platforms that may be in place. The next generation of office tools will be XML based.

XML Schema

The definition of content used in an XML document, incorporating business process information and information about different data types. This definition is used by developers to translate the nature of the data within the XML document in the integration of e-commerce systems. It is essential for smooth data transfer that systems use the same schemas to translate XML tags. Currently developers and XML standards bodies are defining which schemas to use for data transfers in a variety of applications. As and when standard schemas are agreed they are typically placed in repositories on the web so they can be picked up and adopted by application developers.