



government on the web

a report by the comptroller and auditor general

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glossary

Bandwidth: now refers to the capacity for information to be transmitted via the Internet, which affects the speed of transmission, measured in terms of bits per second.

'Bare bones' costs: The most immediate costs of running a Web site or intranet. Elements included are: the capital costs of new servers and dedicated equipment; the costs of ISP services; payments to contractors for design or other Web-specific services; and the running costs of staff working directly on maintaining or developing Web sites or intranets. However, the more general costs of preparing or providing the content material for a Web site or intranet are not included.

Branding: The development of a strong commercial identity which conveys a strongly positive image of a product or service to customers.

Brochureware: Hypertext versions of previously published information. Often quite literally HTML or PDF versions of agency brochures.

Browser: Software which allows the user to read hypertext files. The browser communicates with a given Web site's server and displays documents to the user.

Call-centre: A group of staff trained and equipped specifically to field telephone calls efficiently and to answer routine queries with the aid of databases giving details of products, services and customers. More specialised enquiries are routed to skilled employees outside the centre. Innovations in call centres include CTI: Computer-Telephony Integration, a call management technique in which a telephone passes information to a computer which allows the operator to better respond to the caller's problem.

Channel: A means of communication between an organisation and its customers or users.

Channel equity problem: An inequality which can arise when more information or more up-to-date information is provided on one means of communication with customers or users than on another. People accessing information via the better channel are advantaged over other users accessing the less complete or less up-to-date channel.

Channel rivalry: A situation where an organisation provides a new means or channel of communication which erodes the cost effectiveness of an existing channel. The problem is most

acute where the new channel cannot immediately provide a full replacement for the earlier channel. For instance, a manufacturing company which sold its products directly to customers over the Web at cheaper prices might find that retailers are less willing to stock and market its products because they cannot compete on price.

Click-throughs: A visitor is said to have 'clicked-through' a Web site when she opens a banner advertisement there which transfers her to the advertiser's site. Advertisers pay the owners of the site which hosts their banner ad by the number of click-throughs recorded.

Content-providers: Individuals or sections within an organisation which contribute materials (in the form of HTML pages, forms, documents, graphics files or PDF files) to the organisation's Web site or intranet, but which do not have overall control of the specification or design of the site or intranet.

Dealing: A connected set of transactions between citizens or firms and a government agency. Getting something done.

Digital signature: Coded information added to a message to uniquely identify the sender and authenticate who the message is from.

Directory service: A guide showing how to contact individuals or sections within an organisation via e-mail or the Web.

Displacement effect: A shift in the means that people use to contact an organisation which occurs when a new form of contact route becomes available. Positive displacement effects occur when people switch from an expensive contact route (such as visiting the organisation's offices or phoning in enquiries) to a cheaper or more cost-effective route (such as accessing the organisation's Web site).

Drivers: Changes in tastes, trends, economic variables and single or repeated events which all act as stimuli inducing a system or organisation to develop in a particular direction.

E-commerce: Selling products or services to customers using the Internet as the main means for communication and accomplishing transactions.

E-mail: A service that enables people to exchange documents or messages in electronic form. E-mail systems now mainly

operate via the Internet. However, earlier forms of e-mail operated on separate computer networks without Web access, and these versions only allowed users to send mail to other users of the same system - for instance, within a single organisation.

E-mail address: The unique, private Internet or network address to which e-mail is sent. It takes the form: user@host.

Electronic Data Interchange (EDI): The transfer of structured data, by agreed message standards from computer to computer by electronic means.

Electronic Document Management (EDM): A system adopted by organisations for storing all their information and documents in a secure electronic form, using a developed electronic indexing and filing system which is easily searchable. EDM does away with paper filing registries and facilitates the widest access to documents and information across an organisation.

Electronic forms: Forms available on a Web site or intranet, which a user can complete on the screen and then either print off and post back, or submit on-line.

Electronic payments: Transfers of money made electronically from an organisation's bank account directly to an individual user's bank account - for example some automated benefit payments from the Department of Social Security.

Electronic signature: Coded or encrypted information which authenticates a document or form as coming from a particular individual or PC.

Electronic transactions: In ordinary language, dealings between people and organisations (such as finding out a piece of information, filling out a form, or making a payment) that take place using the Internet and the Web. Within British government circles alone, 'electronic' transactions are also more broadly defined so as to include in addition to Web dealings, systematic phone dealings by citizens, electronic data interchange, electronic payments, use of electronic 'kiosks' and a number of other means of contact.

Encryption: A mechanism for coding or 'scrambling' electronic documents or messages, to enable them to travel between networks securely without risk of them being read by third parties.

External Web site: A collection of Web pages stored on a single server and published on the Internet by a single organisation or individual. The pages can be accessed by outside users without any special authorisation.

Extranet: A system for regular communication between an organisation and its main suppliers or implementation partners.

Typically extranets are closed private computer networks that function at least partially over the public connections of the Internet, using encryption to ensure privacy. They are designed to give authorised outsiders access to an organisation's Intranet from outside its network by direct telephone dial-up from a PC or by coming in from the Web through a firewall.

Firewall: A network security system used to restrict external traffic to an organisation's internal system. Firewalls filter out computer viruses and disruptive or unwanted communications.

Fix: An ad hoc means of making computer or IT systems work in a short-term way, until a more permanent solution can be devised.

Frames Design: A method of implementing a Web site in which parts of an initial screen remain visible: when the user clicks on to subsequent screens a 'frame' from the home page is still displayed, with the new material showing within it.

Government Secure Intranet (GSI): A secure intranet linking together government departments and other public agencies, which also provides controlled access to the Internet, inaugurated in February 1998. GSI offers inter-agency e-mail without need for encryption for material up to and including 'Restricted' status, e-mail to the Internet, browser facilities, file transfer and directory services. To gain access to GSI an agency must first be accredited, so as to maintain the system's overall level of security.

Graphical user interface (GUI): An on-screen display on a PC which lets people use a mouse or pointer to click on icons which represent commands, windows, files, applications and pull-down menus, rather than requiring users to remember and type in text commands. An example is the Windows operating system.

Hit: A single request from a PC with a browser to an organisation's Web server for an element of a Web page. Because one page may contain several elements (such as text, frames, and graphics files), the relevant server will often register multiple hits in response to single click or page request. Recording the number of hits has historically been a common way of measuring traffic on Web sites, but it is not now a very useful measure. One reason is that hits may increase just because page designs involve more discrete elements.

Home page: The first page of an organisation's Web site which users see, and the central page for directing people to different parts of the site.

HTML: HyperText Markup Language, the main language used to create Web documents.

Hypertext links: The 'clickable' links that connect pages on the Web to each other.

Information and communication technologies (ICT): The application of computer science to ways of organising and storing information and facilitating its transfer amongst users.

Interaction: A two-way exchange of information or transaction.

Interactivity: The extent to which someone can provide information to an organisation's Web site, as well as receiving information from it.

Internet service provider (ISP): A company which provides connections to the Internet and other related services to customers, either for a regular fee or as a free service financed by advertising or a small additional phone cost.

Internet: A worldwide collection of computer networks sharing common standards and protocols of communication, in particular a common addressing scheme. The World Wide Web is now the main Internet application, but there are other facilities on it too, such as file transfer facilities and user groups not operating via the Web.

Intranets: A network linking computers within a given organisation which is closed to outsiders. Its structure and user interface are based on those of the Internet.

Java: A programming language which operates across many different computers and systems (designed by Sun Microsystems).

Knowledge-management: techniques for maximising the ability of people within an organisation to find the critical information they need for intelligent decision-making in the most speedy, reliable and cost-effective ways. In the current period most knowledge-management focuses on providing improved ICTs and better training for staff.

Legacy systems: Existing mainframes and networks, and the software based on them, which were developed within an organisation before the use of Web-based technologies became widespread.

Link: An graphic or piece of text on a Web page which refers to another Web page on another Web site. When the link is 'clicked', that page will be retrieved and displayed

Local Area Network (LAN): A private network located in a geographically small area such as a university campus or a complex of office buildings. LANs typically provide a low-cost medium with high bandwidth or capacity to handle communications, to which many users can be connected.

'Look and feel': The general appearance of an organisation's Web site or intranet. A standard 'look and feel' helps users to

be aware of which site they are in and gives them assurance that its features will work in a standardised way.

Mirror: A mirrored Web site has had its structure and content duplicated onto another server. This is typically done to provide backup for the main site, or to ease traffic on the main site's servers. Organisations also often mirror their external Web site to their intranet, so that even staff who do not have full Internet access can see the site.

Non-reactive measures: Any method for researching social behaviour which uses objective means of recording what people do, where those being studied are unaware of the research and so do not change their behaviour. This approach contrasts with surveys, where respondents to a questionnaire may always alter what they say to give what they think is a 'better' answer or to say what they think interviewers want to hear.

Page accesses: A page access (or 'page impression') occurs when a user's browser shows her a complete page from a Web site. Page accesses provide a better measure of site traffic than recording hits, but are less useful than data on user sessions.

PDF: A format of document that allows a file to be downloaded from the Web, using Adobe's popular Acrobat viewer, which can also be downloaded free.

Point of service standards: The way in which customers are treated at the time when they are served, usually the concluding stage of a transaction.

Portal: Any well-used gateway to the Internet, especially those sites designed to serve as a 'front door' and thus the first page that users see when accessing the Web. Portals typically provide large catalogues of other sites, powerful search engines for locating information, and e-mail facilities or other attractive Web services.

Protocol: A convention controlling the format of inputs and outputs between two network devices, allowing them to talk to each other.

Search engine: A database of Web page extracts that can be queried to find references to a person, subject or topic across the World Wide Web as a whole. Many Web sites and intranets provide similar but smaller search facilities for finding material on their site alone.

Server: A computer or network of computers that makes services available on a network (for example, access to a Web site).

TCP/IP: An acronym for Transmission Control Protocol/Internet Protocol. It is a protocol for file transfer which is designed to allow users to send large files without fear

of corruption over perhaps unreliable networks. It is a foundation of the World Wide Web.

Transactions: A transaction with an agency is an interaction with it. This interaction could be the receipt or dissemination of information, the completion or submission of a form or more complicated sets of dealings.

Transparency: The extent to which an organisation's Web site gives users who access it an insight into how the organisation is structured - for example by providing an organisation chart or a directory of e-mail addresses for sections or individual staff members.

'True' Intranet: A network open only to users connected to a Local Area Network.

Under-Web: Informal networks made up of e-mail groups, or rings of people communicating information about Web or intranet pages which are not registered with search engines and hence not accessible by other users.

URL: Universal Resource Locator. A unique identifier of a page which is the standard address of files on the Web (for example: <http://www.open.gov.uk>). The components of an URL are: protocol // domain:port / path / filename.

User session: A single visit by a user to a particular Web site, which may be a repeat visit or a first-time visit. This measure provides the most useful and reliable way of gauging the volume of traffic to a site.

Version control problem: A mismatch which occurs when more than one version of a document is in circulation simultaneously. The problem can arise when a new version of a document is made available while an old version has not been withdrawn, or if different versions of the same material are published in printed form and on an organisation's Web site or intranet.

Virtual extranet: A de facto network consisting of a secure part of an organisation's Web site plus outside authorised users who can visit it using secure password access.

Visit: Any occasion when a person clicks through to a given Web site or intranet. 'Unique visits' refer to distinct persons coming to the site: here first-time users are recorded while repeat users (those returning to the site for a second or subsequent time) are not.

The Web: the World Wide Web, see below.

Web-enabling: The adaptation of existing ICTs so that at some stage Web-based technologies are employed - for example, creating a channel of communication with users or accessing information held on legacy systems using a browser.

Web page: A single document on the World Wide Web.

Web site: A collection of Web pages located on a common server and published on the Internet by a single organisation or individual. The pages can be accessed by outside users without any special authorisation.

White mail: Conventional surface or air mail. Sometimes informally referred to in pejorative terms as 'snail mail' because it is thought less speedy than e-mail.

World Wide Web: The complete ensemble of graphics and text documents published on Web sites and inter connected via the Internet through clickable 'hypertext' links.

Zero-touch process: An administrative operation capable of being performed without a human operator's involvement, by means of automatic systems and checks

Zip file: A file in compressed format, commonly used to transmit large files.