

GLOSSARY

24/7 operation The operation of a site or service 24 hours a day, seven days a week.

802.11a, 802.11b, 802.11g, 802.11n An improved version of Wi-Fi introduced in 2002; it is capable of transmitting data at speeds up to 54 Mbps.

Acceptance An expression of willingness to take an offer, including all of its stated terms.

Access control list (ACL) A list of resources and the usernames of people who are permitted access to those resources within a computer system.

Account aggregation A feature of online banks that allows a customer to obtain bank, investment, loan, and other financial account information from multiple Web sites and to display it all in one location at the bank's Web site.

Account manager A person who keeps track of multiple Web sites in use by a project or keeps track of the projects that combine to create a larger Web site.

Accredited Standards Committee X12 (ASC X12) A committee that develops and maintains uniform EDI standards in the United States.

Acquiring bank Synonymous with merchant bank, which is a bank that does business with merchants who want to accept credit cards.

Acquisition cost The total amount of money that a site spends, on average, to draw one visitor to the site.

Active ad A Web ad that generates graphical activity that "floats" over the Web page itself instead of opening in a separate window.

Active content Programs that are embedded transparently in Web pages that cause action to occur.

Active Server Pages (ASP) Applications that generate dynamic content within Web pages using either Jscript code or Visual Basic.

Active wiretapping An integrity threat that exists when an unauthorized party can alter a message stream of information.

ActiveX An object, or control, that contains programs and properties that are put in Web pages to perform particular tasks.

Activity A task performed by a worker in the course of doing his or her job.

Ad view A Web site visitor page request that contains an advertisement.

Ad-blocking software A program that prevents banner ads and pop-up ads from loading.

Addressable media Advertising efforts sent to a known addressee; these include direct mail, telephone calls, and e-mail.

Advanced Encryption Standard (AES) The new encryption standard designed to keep government information secure using the Rijndael algorithm. Introduced in February 2001 by the National Institute of Standards and Technology (NIST).

Advertising-subscription mixed revenue model A revenue model in which subscribers pay a fee and accept some level of advertising.

Advertising-supported revenue model A revenue model in which Web sites provide free content along with advertising or messages provided by other companies that pay the Web site operator for delivering the advertising or messages.

Affiliate marketing An advertising technique in which one Web site (called an “affiliate”) includes descriptions, reviews, ratings, or other information about products that are sold on another Web site. The affiliate site includes links to the selling site, which pays the affiliate site a commission on sales made to visitors that arrived from a link on the affiliate site.

Affiliate program broker A company that serves as a clearinghouse or marketplace for sites that run affiliate programs and sites that want to become affiliates.

American National Standards Institute (ANSI) The coordinating body for electrical, mechanical, and other technical standards in the United States.

Anchor tag The HTML tag used to specify hyperlinks.

Animated GIF Animated Web ad graphics that grab a visitor’s attention.

Anonymous electronic cash Electronic cash that cannot be traced back to the person who spent it.

Anonymous FTP A protocol that allows users to access limited parts of a remote computer using FTP without having an account on the remote computer.

Antivirus software Software that detects viruses and worms and either deletes them or isolates them on the client computer so they cannot run.

Applet A program that executes within another program; it cannot execute directly on a computer.

Application (application program, application software) A program that performs a specific function, such as creating invoices, calculating payroll, or processing payments received from customers.

Application integration The coordination of all of a company’s existing systems to each other and to the company’s Web site.

Application server A middle-tier software and hardware combination that lies between the Internet and a corporate back-end server.

Application service provider (ASP) A Web-based site that provides management of applications such as spreadsheets, human resources management, or e-mail to companies for a fee.

Application software Synonymous with application.

Applications specialist The member of an electronic commerce team who is responsible for maintenance of software that performs a specific function, such as catalog, payment processing, accounting, human resources, and logistics software.

Ascending-price auction A type of auction in which bidders publicly announce their successively higher bids until no higher bid is forthcoming; also called an English auction.

Asymmetric connection An Internet connection that provides different bandwidths for each direction.

Asymmetric digital subscriber line (ADSL) Internet connections using the DSL protocol with bandwidths from 16 to 640 Kbps upstream and 1.5 to 9 Mbps downstream.

Asymmetric encryption Synonymous with public-key encryption, which is the encoding of messages using two mathematically related but distinct numeric keys.

Asynchronous transfer mode (ATM) Internet connections with bandwidths of up to 622 Gbps.

Attachment A data file (document, spreadsheet, or other) that is appended to an e-mail message.

Auctioneer The person who manages an auction.

Auction consignment services Companies that take an item and create an online auction for that item, handle the transaction, and remit the balance of the proceeds after deducting a fee. These services are performed on behalf of people and small businesses who want to use an online auction but do not have the skills or the time to become a seller.

Authority to bind The ability of an individual to commit his or her company to a contract.

Automated clearing house (ACH) One of several systems set up by banks or government agencies, such as the U.S. Federal Reserve Board, that process high volumes of low dollar amount electronic fund transfers.

Backbone routers Computers that handle packet traffic along the Internet's main connecting points; they can each handle more than 50 million packets per second.

Backdoor An electronic hole in electronic commerce software left open by accident or intentionally.

Bandwidth The amount of data that can be transmitted in a fixed amount of time. Also, the number of simultaneous site visitors that a Web site can accommodate without degrading service.

Banner ad A small rectangular object on a Web page that displays a stationary or moving graphic and includes a hyperlink to the advertiser's Web site.

Banner advertising network An organization that acts as a broker between advertisers and Web sites that carry ads.

Banner exchange network An organization that coordinates ad sharing so that other sites run your ad and your site runs other exchange members' ads.

Base 2 (binary) A number system in which each digit is either a 0 or a 1, corresponding to a condition of either "off" or "on." Also known as a binary system.

Bayesian revision A statistical technique in which additional knowledge is used to revise earlier estimates of probabilities.

Behavioral segmentation The creation of a separate experience for customers based on their behavior.

Benchmarking Testing that compares hardware and software performances.

Bid An offer of a certain price made on an item that is up for auction.

Bidder A potential buyer at an auction; one who places bids.

Bill presentment A Web site feature that allows customers to view and pay bills online.

Biometric security device A security device that uses an element of a person's biological makeup to confirm identification. These devices include writing pads that detect the form and pressure of a person writing a signature, eye scanners that read the pattern of blood vessels in a person's retina, and palm scanners that read the palm of a person's hand (rather than just one fingerprint).

Black hat hackers Hackers who use their skills for ill purposes.

Black list spam filter Software that looks for From addresses in incoming messages that are known to be spammers. The software can delete the message or put it into a separate mailbox for review.

Blade server A server configuration in which small server computers are each installed on a single computer board and then many of those boards are installed into a rack-mounted frame.

Blog (Web log) A Web site on which people post their thoughts and invite others to add commentary.

Bluetooth A wireless standard that is used for short distances and lower bandwidth connections.

Border router The computers located at the border between the organization and the Internet that decide how best to forward each packet of information as it travels on the Internet to its destination. Synonymous with gateway computer and gateway router.

Brand Customers' perceptions of a product.

Brand leveraging A strategy in which a well-established Web site extends its dominant positions to other products and services.

Breach of contract The failure of one party to comply with the terms of a contract.

Broadband Connections that operate at speeds of greater than about 200 Kbps.

Buffer An area of a computer's memory that is set aside to hold data read from a file or database.

Buffer overrun (buffer overflow) An error that occurs when programs filling buffers malfunction and overflow the buffer, spilling the excess data outside the designated buffer memory area.

Bulk mail Electronic junk mail that can include solicitations, advertisements, or e-mail chain letters. Also called spam or unsolicited commercial e-mail.

Business logic Rules of a particular business.

Business manager The member of an electronic commerce team who is responsible for implementing the elements of the business plan and reaching the objectives set by the internal team. The business manager should have experience in and knowledge of the business activity being implemented in the site.

Business model A set of processes that combine to yield a profit.

Business process patent A patent that protects a specific set of procedures for conducting a particular business activity.

Business processes The activities in which businesses engage as they conduct commerce.

Business-to-business (B2B) Transactions conducted between businesses on the Web.

Business-to-consumer (B2C) Transactions conducted between shoppers and businesses on the Web.

Business-to-government (B2G) A category of electronic commerce that includes business transactions with government agencies, such as paying taxes and filing required reports.

Business unit A unit within a company that is organized around a specific combination of product, distribution channel, and customer type. Synonymous with strategic business unit.

Byte An 8-bit number (in most computer applications).

Call center A company that handles customer telephone calls and e-mails for other companies.

Cannibalization The loss of traditional sales of a product to its electronic counterpart.

Capital investment A major outlay of funds made by a company to purchase fixed assets such as property, a factory, or equipment.

Capital project Synonymous with capital investment.

Card not present A credit card transaction in which the merchant's location and the purchaser's location are different.

Cascading Style Sheets (CSS) An HTML feature that allows designers to apply many predefined page display styles to Web pages.

Catalog On electronic commerce sites, a listing of goods or services that may include photographs and descriptions, often stored in a database.

Catalog model A revenue model in which the seller establishes a brand image, then uses the strength of that image to sell through printed catalogs mailed to prospective buyers. Buyers place orders by mail or by calling the seller's toll-free telephone number.

Category manager A company that handles responsibility for a particular product line within a retail store. Synonymous with channel distribution manager or fulfillment manager.

Cause marketing An affiliate marketing program that benefits a charitable organization.

Centralized architecture A server structure that uses a few very large and fast computers.

Certification authority (CA) A company that issues digital certificates to organizations or individuals.

Challenge-response A content-filtering security technique that requires an unknown sender to reply to a challenge presented in an e-mail. These challenges are designed so that a human can respond easily, but a computer would have difficulty formulating the response.

Change management The process of helping employees cope with changes in the workplace.

Channel conflict The problem that arises when a company's sales in one sales outlet interferes with its sales in another sales outlet; for example, when sales through the company's Web site interfere with sales in that company's retail store.

Channel cooperation A strategy that coordinates sales and credit among various sales outlets, including online, catalog, and brick-and-mortar sales.

Channel distribution manager A company that handles responsibility for a particular product line within a retail store. Synonymous with category manager or fulfillment manager.

Charge card A card with no preset spending limit. The entire amount charged to the card must be paid in full each month.

Chargeback The process in which a merchant bank retrieves the money it placed in a merchant account as a result of a cardholder successfully contesting a charge.

Check 21 A U.S. law that permits banks to replace the physical movement of checks with transmission of scanned images.

Cipher text Text that is composed of a seemingly random assemblage of bits. Cipher text is what messages become after they are encrypted.

Circuit A specific route between source and destination along which data travels.

Circuit switching A way of connecting computers or other devices that uses a centrally controlled single connection. In this method, which is used by telephone companies to provide voice telephone service, the connection is made, data is transferred, and the connection is terminated.

Click Synonymous with click-through.

Clickstream Data about site visitors.

Click-through The loading of an advertiser's Web page that results from a visitor clicking on a banner advertisement on another Web page.

Client-level filtering An e-mail content filtering technique in which the filtering software is placed on the individual user's computer.

Client/server architecture A combination of client computers running Web client software and server computers running Web server software.

Client-side electronic wallet An electronic wallet that stores a consumer's information on the consumer's own computer.

Client-side scripting The embedding of script languages in HTML documents.

Closed architecture The use of proprietary communication protocols by computer manufacturers in the early days of computing, preventing computers made by different manufacturers from being connected to each other. Also called proprietary architecture.

Closed loop system A payment card arrangement involving a consumer, a merchant, and a payment card company (such as American Express or Discover) that processes transactions between the consumer and merchant without involving banks.

Closing tag The second half of a two-sided HTML tag; it is identified by a slash (/) that precedes the tag's name.

Collector In a phishing attack, the computer that collects data from the potential victim.

Collision The occurrence of two messages resulting in the same hash value; the probability of this happening is extremely small.

Co-location (collocation, colocation) An Internet service arrangement in which the service provider rents a physical space to the client to install its own server hardware.

Colon hexadecimal (colon hex) The shorthand notation system used for expressing IPv6 addresses that uses eight groups of 16 bits ($8 \times 16 = 128$). Each group is expressed as four hexadecimal digits and the groups are separated by colons.

Commerce service provider (CSP) A Web host service that also provides commerce hosting services on its computer.

Commodity item A product or service that has become so standardized and well-known that buyers cannot detect a difference in the offerings of various sellers; buyers usually base their purchase decisions for such products and services solely on price.

Common law The part of English and U.S. law that is established by the history of law.

Communication modes Ways of identifying and reaching customers.

Company A business engaged in commerce; synonymous with firm.

Component outsourcing Synonymous with partial outsourcing; the outsourcing of the design, development, implementation, or

operation of specific portions of an electronic commerce system.

Component-based application system A business logic approach that separates presentation logic from business logic.

Computer forensics The field responsible for the collection, preservation, and analysis of computer-related evidence.

Computer forensics expert An individual hired to access client computers to locate information that can be used in legal proceedings.

Computer network Any technology that allows people to connect computers to each other.

Computer security The protection of computer resources from various types of threats.

Computer virus Synonymous with virus, which is software that attaches itself to another program and can cause damage when the host program is activated.

Configuration table Information about connections that lead to particular groups of routers, specifications on which connections to use first, and rules for handling instances of heavy packet traffic and network congestion.

Conflict of laws A situation in which federal, state, and local laws address the same issues in different ways.

Consideration The bargained-for exchange of something valuable, such as money, property, or future services.

Constructive notice The idea that citizens should know that when they leave one area and enter another, they become subject to the laws of the new area.

Consumer-to-business An industry term for electronic commerce that occurs in general consumer auctions; bidders at a general consumer auction might be businesses.

Consumer-to-consumer (C2C) A category of electronic commerce that includes individuals who buy and sell items among themselves.

Content creator A person who writes original content for a Web site.

Content editor A person who purchases and adapts existing material for use on a Web site.

Content management software Software used by companies to control the large amounts of text, graphics, and media files used in business.

Content manager Synonymous with content editor.

Context-Inspired Component Architecture (CICA) A set of standards for assembling business messages that provides a predictable structure for the content of those messages.

Contextual advertising An advertising technique in which ads are placed in proximity to related content.

Contract An agreement between two or more legal entities that provides for an exchange of value between or among them.

Contract purchasing Direct materials purchasing in which the company negotiates long-term contracts for most of the materials that it will need. Also called replenishment purchasing.

Conversion The transition of a first-time visitor to a customer.

Conversion cost The total amount of money that a site spends, on average, to induce one visitor to make a purchase, sign up for a subscription, or (on an advertising-supported site) register.

Conversion rate Used in advertising to calculate the percentage of recipients that respond to an ad or promotion.

Cookie Bits of information about Web site visitors created by Web sites and stored on client computers.

Cookie blocker A third-party program that prevents cookie storage selectively.

Copy control An electronic mechanism for providing a fixed upper limit to the number of copies that one can make of a digital work.

Copyright A legal protection of intellectual property.

Cost per thousand (CPM) An advertising pricing metric that equals the dollar amount paid to reach 1000 people in an estimated audience.

Countermeasure A physical or logical procedure that recognizes, reduces, or eliminates a threat.

Cracker A technologically skilled person who uses his or her skills to obtain unauthorized entry into computers or network systems, usually with the intent of stealing information or damaging the information, the system's software, or the system's hardware.

Crawler Synonymous with spider

Credit card A payment card that has a spending limit based on the cardholder's credit limit. A minimum monthly payment must be made against the balance on the card, and interest is charged on the unpaid balance.

Credit card associations Member-run organizations that issue credit cards to individual consumers. Also called customer issuing banks.

Cryptography The science that studies encryption, which is the hiding of messages so that only the sender and receiver can read them.

Culture The combination of language and customs that are unique to a particular population.

Customer issuing banks Member-run organizations that issue credit cards to individual consumers. Also called credit card associations.

Customer life cycle The five stages of customer loyalty.

Customer portal A corporate Web site designed to meet the needs of customers by offering additional services such as private stores, part number cross-referencing, product-use guidelines, and safety information.

Customer relationship management Synonymous with technology-enabled relationship management, it is the obtaining and use of detailed customer information.

Customer relationship management (CRM) software Software that collects data on customer activities; this data is then used by managers to conduct analytical activities.

Customer service The people within an electronic commerce team who are responsible for managing customer relationships in the electronic commerce operation.

Customer value The cost that a customer pays for a product, minus the benefits the customer gains from the product.

Customer-centric The Web site development approach of putting the customer at the center of all site designs.

Cyber vandalism The electronic defacing of an existing Web site page.

Cybersquatting The practice of registering a domain name that is the trademark of another person or company with the hope that the trademark owner will pay huge amounts of money for the domain rights.

Data Encryption Standard (DES) An encryption standard adopted by the U.S. government for encrypting sensitive information.

Data mining Looking for hidden patterns in data.

Database The storage element of a search engine.

Database administration The function within an electronic commerce team that is responsible for defining the data elements in the database design and the operation of the database management software.

Database manager Software that stores information in a highly structured way.

Database server The server computer on which database management software runs.

Data-grade line The quality of telephone wiring in most urban and suburban areas; made more carefully of higher grade copper than voice-grade lines so they might better carry data.

Dead link A Web link that when clicked displays an error message instead of a Web page.

Debit card A payment card that removes the amount of the charge from the cardholder's bank account and transfers it to the seller's bank account.

Decentralized architecture A server structure that uses a large number of less-powerful computers and divides the workload among them.

Decrypted Information that has been decoded. The opposite of encrypted.

Decryption program A procedure to reverse the encryption process, resulting in the decoding of an encrypted message.

Dedicated hosting A Web hosting option in which the hosting company provides exclusive use of a specific server computer that is owned and administered by the hosting company.

Defamatory statement A statement that is false and injures the reputation of a person or company.

Demographic information Characteristics that marketers use to group visitors, including address, age, gender, income level, type of job held, hobbies, and religion.

Demographic segmentation The grouping of customers by characteristics such as age, gender, family size, income, education, religion, or ethnicity.

Descending-price auction Synonymous with Dutch auction, which is an open auction in which bidding starts at a high price and drops until a bidder accepts the price.

Dictionary attack program A program that cycles through an electronic dictionary, trying every word in the book as a password.

Digital certificate (digital ID) An attachment to an e-mail message or data embedded in a Web page that verifies the identity of a sender or Web site.

Digital signature An encryption message digest.

Digital Subscriber Line (DSL) Telephone-line ISP connectivity that is a higher grade than standard 56K connectivity.

Digital watermark A digital code or stream embedded undetectably in a digital image or audio file.

Direct connection EDI The form of EDI in which EDI translator computers at each company are linked directly to each other through modems and dial-up telephone lines or leased lines.

Direct materials Materials that become part of the finished product in a manufacturing process.

Disintermediation The removal of an intermediary from a value chain.

Distributed architecture Synonymous with decentralized architecture, which is a server structure that uses a large number of less-powerful computers and divides the workload among them.

Distributed database system A database within a large information system that stores the same data in many different physical locations.

Distributed information system A large information system that stores the same data in many different physical locations.

Domain name The address of a Web page, it can contain two or more word groups separated by periods. Components of domain names become more specific from right to left.

Domain name hosting A service that permits the purchaser of a domain name to maintain a simple Web site so that the domain name remains in use.

Domain name ownership change The changing of owner information maintained by a public domain registrar in the registrar's database to reflect the new owner's name and business address.

Domain name parking Synonymous with domain name hosting.

Domain name server (DNS) A computer on the Internet that maintains directories that link domain names to IP addresses.

Dotted decimal The IP address notation in which addresses appear as four separate numbers separated by periods.

Double auction A type of auction in which buyers and sellers each submit combined price-quantity bids to an auctioneer. The auctioneer matches the sellers' offers (starting with the lowest price, then going up) to the buyers' offers (starting with the highest price, then going down) until all of the quantities are sold.

Double-spending The spending of the same unit of electronic cash twice by submitting the same electronic currency to two different vendors.

Download To receive a file from another computer.

Downstream bandwidth (downlink bandwidth) The connection that occurs when information travels to your computer from your ISP.

Downstream strategies Tactics that improve the value that a business provides to its customers.

Due diligence Background research procedures.

Dutch auction A form of open auction in which bidding starts at a high price and drops until a bidder accepts the price.

Dynamic catalog An area of a Web site that stores information about products in a database.

Dynamic content Nonstatic information constructed in response to a Web client's request.

Dynamic page A Web page whose content is shaped by a program in response to a user request.

Early outsourcing The hiring of an external company to do initial electronic commerce site design and development. The external team then trains the original company's information systems professionals in the new technology, eventually handing over complete responsibility of the site to the internal team.

Eavesdropper A person or device who is able to listen in on and copy Internet transmissions.

EDI for Administration, Commerce, and Transport (EDIFACT) The 1987 publication that summarizes the United Nations' standard transaction sets for international EDI.

EDI-capable banks Banks that are able to exchange payment and remittance through value-added networks.

EDI compatible Firms that are able to exchange data in specific standard electronic formats with other firms.

Effect The impact of an action.

E-government The use of electronic commerce by governments and government agencies to perform businesslike activities.

Electronic business (e-business) Another term for electronic commerce; sometimes used as a broader term for electronic commerce that includes all business processes, as distinguished from a narrow definition of electronic

commerce that includes sales and purchase transactions only.

Electronic cash A form of electronic payment that is anonymous and can be spent only once.

Electronic commerce (e-commerce) Business activities conducted using electronic data transmission over the Internet and the World Wide Web.

Electronic Commerce Modeling Language (ECML) A proposed standard for electronic wallets that provides universal standard field names.

Electronic customer relationship management (eCRM) Synonymous with technology-enabled relationship management, it is the obtaining and use of detailed customer information.

Electronic data interchange (EDI) Exchange between businesses of computer-readable data in a standard format.

Electronic funds transfer (EFT) Electronic transfer of account exchange information over secure private communications networks.

Electronic mail (e-mail) Messages that are sent from one user to another (or multiple recipients) using particular mail programs and protocols.

Electronic wallet (e-wallet) A software utility that holds electronic cash, credit card information, owner identification and address information, and provides this data automatically at electronic commerce sites.

E-mail client software Programs used to read and send e-mail.

E-mail server A computer that is devoted to handling e-mail.

EMV standard A single standard for the handling of payment card transactions developed cooperatively by Visa, MasterCard, and MasterCard Europe.

Encapsulation The process that occurs when VPN software encrypts packet contents, then places the encrypted packets inside an IP wrapper in another packet.

Encryption The coding of information using a mathematical-based program and secret key, it makes a message illegible to casual observers or those without the decoding key.

Encryption algorithm The logic that implements an encryption program.

Encryption program A program that transforms plain text into cipher text.

English auction A type of auction in which bidders publicly announce their successively higher bids until no higher bid is forthcoming.

Enterprise application integration The coordination of all of a company's existing systems to each other and to the company's Web site.

Enterprise-class software Commerce software used by large-scale electronic commerce businesses.

Enterprise resource planning (ERP) Business software that integrates all facets of a business, including planning, manufacturing, sales, and marketing.

Entity body The part of a message from a client that contains the HTML page requested by the client and passes bulk information to the server.

E-procurement The use of Internet technologies in a company's purchasing and supply management functions.

E-procurement software Software that allows a company to manage its purchasing function through a Web interface.

Escrow service An independent third party who holds an auction buyer's payment until the buyer receives the purchased item and is satisfied that it is what the seller represented it to be.

E-sourcing The use of Internet technologies in the activities a company undertakes to identify vendors that offer materials, supplies, and services that the company needs.

Ethical hacker A computer security specialist hired to probe PCs and locate information that can be used in legal proceedings.

Extensible Hypertext Markup Language (XHTML) A new markup language proposed by the WC3 that is a reformulation of HTML version 4.0 as an XML application.

Extensible Markup Language (XML) A language that describes the semantics of a page's contents and defines data records on a page.

Extensible Stylesheet Language (XSL) A language that formats XML code for viewing in a Web browser.

Extensible system Any system that can be easily enhanced without voiding earlier work done on the system.

Extranet A network system that extends a company's intranet and allows it to connect with the networks of business partners or other designated associates.

E-zine An electronic magazine.

Fair use The approved limited use of copyright material when certain conditions are met.

False positive An e-mail message that is incorrectly rejected by an e-mail filter as being spam when it is actually valid e-mail.

Fast venturing The joining of an existing company that wants to launch an electronic commerce initiative with external equity partners and operational partners who provide the experience and skills needed to develop and scale up the project very rapidly.

Fee-for-service revenue model A revenue model in which payment is based on the value of the service provided.

Fee-for-transaction revenue model A revenue model in which businesses charge a fee for services based on the number or size of the transactions they process.

File Transfer Protocol (FTP) A protocol that enables users to transfer files over the Internet.

Financial EDI (FEDI) The EDI transaction sets that provide instructions to a trading partner's bank.

Financial VANS (FVANS) Value-added networks that are not banks but can translate financial transaction sets into ACH formats and transmit them to banks that are not EDI capable.

Finger An Internet utility program that runs on UNIX computers and allows a user to obtain limited information about other network users.

Firewall A computer that provides a defense between one network (inside the firewall) and another network (outside the firewall, such as the Internet) that could pose a threat to the inside network. All traffic to and from the network must pass through the firewall. Only authorized traffic, as defined by the local security policy, is allowed to pass through the firewall. Also used to describe the software that performs these functions on the firewall computer.

Firm A business engaged in commerce.

First-mover advantage The benefit a company can gain by introducing a product or service before its competitors.

First-party cookie A cookie that is placed on the client computer by the Web server site.

First-price sealed-bid auction A type of auction in which bidders submit their bids independently and privately, with the highest bidder winning the auction.

Fixed-point wireless A data transmittal service that uses a system of repeaters to forward a radio signal from an ISP to customers.

Flat-rate access A telephone usage system in which the consumer or business pays one monthly fee for unlimited telephone line usage.

Float Money deposited in a customer's account that earns interest for the merchant.

Forum selection clause A statement within a contract that dictates that the contract will be enforced according to the laws of a particular state; signing a contract with a forum selection clause constitutes voluntary submission to the jurisdiction named in the forum selection clause.

Four Ps of marketing The essential issues of marketing: product, price, promotion, and place.

Fractional T1 High bandwidth telephone company connections that operate at speeds between 128 Kbps and 1.5 Mbps in 128-Kbps increments.

Frame relay A routing technology.

Fulfillment manager A company that handles responsibility for a particular product line within a retail store. Synonymous with category manager or channel distribution manager.

Full-privilege FTP A protocol that allows users to upload files to and download files from a remote computer using FTP.

Gateway computers Synonymous with routers, which are computers that determine the best way for data packets to move forward.

Gateway server A firewall that filters traffic based on applications requested by clients on the trusted network.

Generalized Markup Language (GML) An early markup language resulting from efforts to create standard formatting styles for electronic documents.

Geographic segmentation The grouping of customers by location of home or workplace.

Graphical user interface (GUI) Computer program control functions that are displayed using pictures, icons, and other easy-to-use graphical elements.

Group purchasing site A type of auction Web site that negotiates with a seller to obtain lower prices on an item as individual buyers enter bids on that item.

Hacker A dedicated programmer who writes complex code that tests the limits of technology; usually meant in a positive way.

Hash algorithm A security utility that mathematically combines every character in a message to create a fixed-length number (usually 128 bits in length) that is a condensation, or fingerprint, of the original message.

Hash coding The process used to calculate a number from a message.

Hash value The number that results when a message is hash coded.

Hexadecimal (base 16) A number system that uses 16 digits.

Hierarchical business organization Firms that include a number of levels with cumulative responsibility. These organizations are typically headed by a top-level president or officer. A number of vice presidents report to the president. A larger number of middle managers report to the vice presidents.

Hierarchical hyperlink structure A hyperlink structure in which the user starts from a home page and follows links to other pages in whatever order they wish.

High-speed DSL (HDSL) An Internet connection service that provides 768 Kbps of symmetric bandwidth.

Home page In a hierarchical Web page structure, the introductory page of a Web site. Synonymous with start page.

Hot spot A wireless access point (WAP) that is open to the public.

HTML extensions Developer-created Web page features that only work in certain browsers.

Hyperlink A type of tag that points to another location in the same or another HTML document. Also called a hypertext link.

Hypertext A system of navigating between HTML pages using links.

Hypertext elements HTML text elements that are related to each other within one document or among several documents.

Hypertext link (hyperlink) A pointer in an HTML document to another location within the same document or to a different HTML document.

Hypertext Markup Language (HTML) The language of the Internet; it contains codes attached to text that describe text elements and their relation to one another.

Hypertext server Synonymous with Web server, which is a computer that is connected to the Internet and that stores files written in HTML that are publicly available through an Internet connection.

Hypertext Transfer Protocol (HTTP) The Internet protocol responsible for transferring and displaying Web pages.

Idea-based networking The act of participating in Web communities that are based on the connections between ideas.

Idea-based virtual community A Web community based on the connections between ideas.

Identity theft A criminal act in which the perpetrator gathers personal information about a victim and then uses that information to obtain credit in the victim's name. After establishing credit accounts, the perpetrator runs up charges on the accounts and then disappears.

Implied contract The agreement between two parties stating that a contract exists, even if no contract has been written and signed.

Impression The loading of a banner ad on a Web page.

Income tax Taxes that are levied by national, state, and local governments on the net income generated by business activities.

Incubator A company that offers start-up businesses a physical location with offices, accounting and legal assistance, computers, and Internet connections at a very low monthly cost.

Independent exchange A vertical portal that is not controlled by a company that was an established buyer or seller in the industry.

Independent industry marketplace A vertical portal that is focused on a specific industry.

Index A list containing every Web page found by a spider, crawler, or bot.

Indirect connection EDI The form of EDI in which each company transmits and receives EDI messages through a value-added network.

Indirect materials Materials and supplies that are purchased by a company in support of the manufacturing of an item, but not directly used in the production of the product.

Industry Multiple firms selling similar products to similar customers.

Industry consortia-sponsored marketplace A marketplace formed by several large buyers in a particular industry.

Industry marketplace A vertical portal that is focused on a single industry.

Industry value chain The larger stream of activities in which a particular business unit's value chain is embedded.

Integrated Services Digital Network (ISDN) High-grade telephone service that uses the DSL protocol and offers bandwidths of up to 128 Kbps.

Integrity The category of computer security that addresses the validity of data; confirmation that data has not been modified.

Integrity violation A security violation that occurs whenever a message is altered while in transit between sender and receiver.

Intellectual property A general term that includes all products of the human mind, including tangible and intangible products.

Intelligent software agent (software robot or bot) A program that performs information gathering, information filtering, and/or mediation on behalf of a person or entity.

Interactive Mail Access Protocol (IMAP) A newer e-mail protocol with improvements over POP.

Interactive marketing unit (IMU) ad format The standard banner sizes that most Web sites have voluntarily agreed to use.

Internet A global system of interconnected computer networks.

Internet access provider (IAP) Synonymous with Internet service provider.

Internet backbone Routers that handle packet traffic along the Internet's main connecting points.

Internet EDI EDI on the Internet.

Internet host A computer that is directly connected to the Internet.

Internet Protocol See TCP/IP.

Internet Protocol version 4 (IPv4) The version of IP that has been in use for the past 20 years on the Internet; it uses a 32-bit number to identify the computers connected to the Internet.

Internet Protocol version 6 (IPv6) The protocol that will replace IPv4.

Internet service provider (ISP) A company that sells Internet access rights directly to Internet users.

Internet2 A successor to the Internet used for conducting research, it offers bandwidths in excess of 1 Gbps.

Interoperability The coordination of a company's information systems so that they all work together.

Interoperable software Software that runs transparently on a variety of hardware and software configurations.

Interstitial ad An intrusive Web ad that opens in its own browser window, instead of the page that the user intended to load.

Intranet An interconnected network of computers operated within a single company or organization.

Intrusion detection system A part of a firewall that monitors attempts to log in to servers and analyzes those attempts for patterns that might indicate a cracker's attack is under way.

IP address The 32-bit number that represents the address of a particular location (computer) on the Internet.

IP tunneling The creation of a private passageway through the public Internet that provides secure transmission from one extranet partner to another.

IP wrapper The outer packet in the encapsulation process.

Java sandbox A Web browser security feature that limits the actions that can be preformed by a Java applet that has been downloaded from the Web.

JavaServer pages (JSP) A server-side scripting program developed by Sun Microsystems.

Java servlet An application that runs on a Web server and generates dynamic content.

JavaScript A scripting language developed by Netscape to enable Web page designers to build active content.

Judicial comity An accommodation by a court in one country in which it voluntarily enforces another country's laws or court judgments when no strict requirement to do so exists.

Jurisdiction A government's ability to exert control over a person or corporation.

Key A number used to encode or decode messages.

Knowledge management The intentional collection, classification, and dissemination of information about a company, its products, and its processes.

Knowledge management (KM) software Software that helps companies collect and organize information, share the information among users, enhance the ability of users to collaborate, and preserve the knowledge gained for future use.

Late outsourcing The hiring of an external company to maintain an electronic commerce site that has been designed and developed by an internal information systems team.

Law of diminishing returns The characteristic of most activities to yield less value as the amount of consumption increases.

Leased line A permanent telephone connection between two points; it is always active.

Legitimacy The idea that those subject to laws should have some role in formulating them.

Life-cycle segmentation The use of customer life cycle stages to create groups of customers that are in each stage.

Linear hyperlink structure A hyperlink structure that resembles conventional paper documents in which the user reads pages in serial order.

Link checker A site management tool that examines each page on the site and reports any URLs that are broken, that seem to be broken, or that are in some way incorrect.

Liquidation broker An agent that finds buyers for unusable and excess inventory.

Load-balancing switch A piece of network hardware that monitors the workloads of servers attached to it and assigns incoming Web traffic to the server that has the most available capacity at that instant in time.

Local area network (LAN) A network that connects workstations and PCs within a single physical location.

Localization A type of language translation that considers multiple elements of the local environment, such as business and cultural practices, in addition to local dialect variations in the language.

Localized advertising Online advertising in which ads are generated in response to a search for products or services in a specific geographic area.

Lock-in effect The inherent greater value to customers of existing companies than new sites.

Log file A collection of data that shows information about Web site visitors' access habits.

Logical security The protection of assets using nonphysical means.

Long-arm statute A state law that creates personal jurisdiction for courts.

Machine translation Language translation that is done by software; such translation can reach speeds of 400,000 words per hour.

Macro virus A virus that is transmitted or contained inside a downloaded file attachment; it can cause damage to a computer and reveal otherwise confidential information.

Mail bomb A security attack wherein many people (hundreds or thousands) each send a message to a particular address, exceeding the recipient's allowable mail limit and causing mail systems to malfunction.

Mail order model Synonymous with catalog model.

Mailing list An e-mail address that forwards messages to certain users who are subscribers.

Maintenance, repair, and operating (MRO) Commodity supplies, including general industrial merchandise and standard machine tools that are used in a variety of industries.

Managed service provider (MSP) A Web site hosting service firm; synonymous with ASP and CSP.

Man-in-the-middle exploit A message integrity violation in which the contents of the e-mail are changed in a way that negates the message's original meaning.

Many-to-many communications model A model of communications in which a number of entities communicate with a number of other entities.

Many-to-one communications model A model of communications in which a number of entities communicate with a single other entity.

Market A real or virtual space in which potential buyers and sellers come into contact with each other and agree on a medium of exchange (such as currency or barter).

Market segmentation The identification by advertisers of specific subsets of their markets that have common characteristics.

Marketing mix The combination of elements that companies use to achieve their goals for selling and promoting their products and services.

Marketing strategy A particular marketing mix that is used to promote a company or product.

Marketspace A market that occurs in the virtual world instead of in the physical world.

Markup tags (tags) Web page code that provides formatting instructions that Web client software can understand.

Masquerading (spoofing) Pretending to be someone you are not (for example, by sending an e-mail that shows someone else as the sender) or representing a Web site as an original when it is an imposter.

Mass media The method of contacting potential customers through the distribution of broadcast, printed, billboard, or mailed advertising materials.

Meetup An in-person meeting between people who are acquainted through a blog.

Merchandising The combination of store design, layout, and product display intended to create an environment that encourages customers to buy.

Merchant account An account that a merchant must hold with a bank that allows the merchant to process payment card transactions.

Merchant bank A bank that does business with merchants who want to accept credit cards.

Mesh routing A version of fixed-point wireless that directly transmits Wi-Fi packets through hundreds of short-range transceivers that are located close to each other.

Message digest The number that results from the application of an encryption algorithm to plain text information.

Meta language A language that comprises a set of language elements and can be used to define other languages.

Metrics Measurements that companies use to assess the value of site visitor activity.

Micromarketing The practice of targeting very small and well-defined market segments.

Micropayments Internet payments for items costing very little—usually \$1 or less.

Middleware Software that handles connections between electronic commerce software and accounting systems.

Minimum bid In an English auction, the price for an item at which the auctioning begins.

Minimum bid increment The amount by which one bid must exceed the previous bid.

Mobile commerce (m-commerce) Resources accessed using devices that have wireless connections, such as stock quotes, directions, weather forecasts, and airline flight schedules.

Monetizing The conversion of existing regular site visitors seeking free information or services into fee-paying subscribers or purchasers of services.

Money laundering A technique used by criminals to convert money that they have obtained illegally into cash that they can spend without having it identified as the proceeds of an illegal activity.

Multipurpose Internet Mail Extension (MIME) An e-mail protocol that allows users to attach binary files to e-mail messages.

Multivector virus A virus that can enter a computer system in several different ways.

Naive Bayesian filter E-mail filtering software that classifies messages based on learned patterns indicated by the e-mail user's categorization of incoming mail. The filter eventually learns to recognize spam and filter it out.

Name changing A problem that occurs when someone registers purposely misspelled variations of well-known domain names. These variants sometimes lure consumers who make typographical errors when entering a URL.

Name stealing Theft of a Web site's name that occurs when someone, posing as a site's administrator, changes the ownership of the domain name assigned to the site to another site and owner.

National Center for Supercomputing Applications (NCSA) Housed at the University of Illinois, Urbana-Champaign, the NCSA is one of the five original centers in the National Science Foundation's Supercomputer Centers Program. Mosaic, the first Internet browser program and predecessor to the Netscape browser, was invented at NCSA.

Necessity The category of computer security that addresses data delay or data denial threats.

Necessity threat The disruption of normal computer processing or denial of processing. Also called delay, denial, or denial-of-service threat (DoS).

Net bandwidth The actual speed information travels, taking into account traffic on the communication channel at any given time.

Network access points (NAPs) The four primary connection points for access to the Internet backbone in the United States.

Network access providers The few large companies that are the primary providers of Internet access; they, in turn, sell Internet access to smaller Internet service providers.

Network Address Translation (NAT) device A computer that converts private IP addresses into normal IP addresses when they forward packets to the Internet.

Network Control Protocol (NCP) Used by ARPANET in the early 1970s to route messages in its experimental wide area network.

Network economic structure A business structure wherein firms coordinate their strategies, resources, and skill sets by forming a long-term, stable relationship based on a shared purpose.

Network effect An increase in the value of a network to its participants, which occurs as more people or organizations participate in the network.

Network operations Web site staff whose responsibilities include load estimation and monitoring, resolving network problems as they arise, designing and implementing fault-resistance technologies, and managing any network operations that are outsourced to ISPs, CSPs, or telephone companies.

Network specification The set of rules that equipment connected to a network must follow.

Newsgroup A topic area in Usenet where people read and post articles.

Nexus The association between a tax-paying entity and a governmental taxing authority.

Nonrepudiation Verification that a particular transaction actually occurred; this prevents parties from denying a transaction's validity or its existence.

Notice The expression of a change in rules (usually, legal or cultural rules) typically represented by a physical boundary.

N-tier architecture Higher-order client-server architectures that have more than three tiers.

Occasion segmentation Behavioral segmentation that is based on things that happen at a specific time or occasion.

Octet An 8-bit number.

Offer A declaration of willingness to buy or sell a product or service; it includes sufficient details to be firm, precise, and unambiguous.

One-to-many communication model A model of communications in which one entity communicates with a number of other entities.

One-to-one communication model A model of communications in which one entity communicates with one other entity.

One-to-one marketing A highly customized approach to offering products and services that match the needs of a particular customer.

One-way function An algorithm that cannot be converted back to its original value.

Online community Synonymous with virtual community, which is an electronic gathering place for people with common interests.

Ontology A set of standards that defines, in detail, the relationships among RDF standards and specific XML tags within a particular knowledge domain.

Open architecture The philosophy behind the Internet that dictates that independent networks should not require any internal changes to be connected to the network, packets that do not arrive at their destinations must be retransmitted from their source network, routers do not retain information about the packets they handle, and no global control exists over the network.

Open auction (open-outcry auction) An auction in which bids are publicly announced (such as an English auction).

Open EDI EDI conducted on the Internet instead of over private leased lines.

Open loop system A payment card arrangement involving a consumer and his or her bank, a merchant and its bank, and a third party (such as Visa or MasterCard) that processes transactions between the consumer and merchant.

Open-outcry double auction A double auction in which buy and sell offers are announced publicly. Typically conducted in exchange floor or trading pit environments for items of known quality, such as securities or graded agricultural products, that are regularly traded in large quantities.

Open session A continuous connection that is maintained between a client and server on the Internet.

Open source Freely available source code for software.

Open-source software Software that is developed by a community of programmers who make the software available for download and use at no cost.

Opening tag An HTML tag that precedes the text that a tag affects.

Opportunity cost Lost benefits from an action not taken.

Optical fiber A data transmission cable that uses glass fibers to achieve bandwidths up to 10 Gbps.

Opt-in A personal information collection policy in which the company collecting the information does not use the information for any other purpose (or sell or rent the information) unless the customer specifically chooses to allow that use.

Opt-in e-mail The practice of sending e-mail messages to people who have requested information on a particular topic or about a specific product.

Opt-out A personal information collection policy in which the company collecting the information assumes that the customer does not object to the company's use of the information unless the customer specifically chooses to deny permission.

Organized crime Unlawful activities conducted by a highly organized, disciplined association for profit. Also called racketeering.

Orphan file A file on the Web site that is not linked to any page.

Outsourcing The hiring of another company to perform design, implementation, or operational tasks for an information systems project.

Packet-filter firewall A firewall that examines all data flowing back and forth between a trusted network and the Internet.

Packets The small pieces of files and e-mail messages that travel over the Internet.

Packet-switched A network in which packets are labeled electronically with their origin, sequence, and destination addresses. Packets travel from computer to computer along the interconnected networks until they reach their destination. Each packet can take a different path through the interconnected networks and the packets may arrive out of order. The destination computer collects the packets and reassembles the original file or e-mail message from the pieces in each packet.

Page view A page request made by a Web site visitor.

Page-based application system Application server software that returns pages generated by scripts that include the rules for presenting data on the Web page with the business logic.

Paid placement (sponsorship) The purchasing of a top listing in results listings for a particular set of search terms.

Partial outsourcing The outsourcing of the design, development, implementation, or operation of specific portions of an electronic commerce system.

Participatory journalism The practice of inviting readers to help write an online newspaper.

Patent An exclusive right to make, use, and sell an invention granted by a government to the inventor.

Payment card A general term for plastic cards used instead of cash to make purchases, including credit cards, debit cards, and charge cards.

Payment processing service provider A third-party company that handles payment card processing for online businesses.

Pay-per-click model A revenue model in which an affiliate earns payment each time a site visitor clicks a link to load the seller's page.

Pay-per-conversion model A revenue model in which an affiliate earns payment each time a site visitor is converted from a visitor into either a qualified prospect or a customer.

Peer-to-peer (P2P) payment system Payments from one type of entity to another of the same type.

Per se defamation A legal cause of action in which a court deems some types of statements to be so negative that injury is assumed.

Perimeter expansion The increase in firewall limits beyond traditional borders caused by telecommuting.

Permission marketing A marketing strategy that only sends specific information to people who have indicated an interest in receiving information about the product or service being promoted.

Persistent cookie A cookie that exists indefinitely.

Personal area network (PAN) A small, low-bandwidth Bluetooth network of up to 10 networks of eight devices each. It used for tasks such as wireless synchronization of laptop computers with desktop computers and wireless printing from laptops, PDAs, or mobile phones. Synonymous with piconet.

Personal contact A method of identifying and reaching customers that involves searching for, qualifying, and contacting potential customers.

Personal firewall A software-only firewall that is installed on an individual client computer.

Personal jurisdiction A court's authority to hear a case based on the residency of the defendant; a court has personal jurisdiction over a case if the defendant is a resident of the state in which the court is located.

Personal shopper An intelligent agent program that learns a customer's preferences and makes suggestions.

Pharming attack The use of a zombie farm, often by an organized crime association, to launch a massive phishing attack.

Phishing expedition A masquerading attack that combines spam with spoofing. The perpetrator sends millions of spam e-mails that appear to be from a respectable company. The e-mails contain a link to a Web page that is designed to look exactly like the company's site. The victim is encouraged to enter his or her username, password, and sometimes credit card information.

PHP: Hypertext Preprocessor (PHP) A Web programming language that can be used to write server-side scripts that generate dynamic Web pages.

Physical security Tangible protection devices such as alarms, guards, fireproof doors, fences, and vaults.

Piconet A small, low-bandwidth Bluetooth network of up to 10 networks of eight devices each. It used for tasks such as wireless synchronization of laptop computers with desktop computers and wireless printing from laptops, PDAs, or mobile phones. Synonymous with personal area network.

Ping (Packet Internet Groper) A program that tests the connectivity between two computers connected to the Internet.

Place (distribution) The need to have products or services available in many different locations.

Plain old telephone service (POTS) The network connecting telephones; it provides a reliable data transmission bandwidth of about 56 Kbps.

Plain text Normal, unencrypted text.

Plug-in An application that helps a browser to display information (such as video or animation) but is not part of the browser.

Pop-behind ad A pop-up ad that is followed very quickly by a command that returns the focus to the original browser window, resulting in an ad that is parked behind the user's browser waiting to appear when the browser is closed.

Pop-up ad An ad that appears in its own window when the user opens or closes a Web page.

Portal (Web portal) A Web site that serves as a customizable home base from which users do their searching, navigating, and other Web-based activity.

Post Office Protocol (POP) The protocol responsible for retrieving e-mail from a mail server.

Postimplementation audit (postaudit review) A formal review of a project after it is up and running.

Power A form of control over physical space (such as a state) and the people and objects that reside in that space.

Presence The public image conveyed by an organization to its stakeholders.

Pretty Good Privacy (PGP) A popular technology used to implement public-key encryption to protect the privacy of e-mail messages.

Price The amount a customer pays for a product.

Primary activities Activities that are required to do business: design, production, promotion, marketing, delivery, and support of products or services.

Privacy The protection of individual rights to nondisclosure of information.

Private company marketplace A marketplace that provides auctions, requests for quotes postings, and other features to companies that want to operate their own marketplace.

Private IP addresses A series of IP numbers that have been set aside for subnet use and are not permitted on packets that travel on the Internet.

Private key A single key that is used to encrypt and decrypt messages. Synonymous with symmetric key.

Private network A private, leased-line connection between two companies that physically links their individual computers or intranets.

Private store A password-protected area of a Web site that offers individual customers negotiated price reductions on a limited selection of products and other customized features.

Private valuation The amount a bidder is willing to pay for an item that is up for auction.

Private-key encryption The encoding of a message using a single numeric key to encode and decode data, it requires both the sender and receiver of the message to know the key, which must be guarded from public disclosure.

Procurement The business activity that includes all purchasing activities plus the monitoring of all elements of purchase transactions.

Product The physical item or service that a company is selling.

Product disparagement A statement that is false and injures the reputation of a product or service.

Project management Formal techniques for planning and controlling activities undertaken to achieve a specific goal.

Project management software Application software that provides built-in tools for managing people, resources, and schedules.

Project manager A person with specific training or skills in tracking costs and the accomplishment of specific objectives in a project.

Project portfolio management A technique in which each project is monitored as if it were an investment in a financial portfolio.

Promotion Any means of spreading the word about a product.

Property tax Taxes levied by states and local governments on the personal property and real estate used in a business.

Proprietary architecture The use of vendor-specific communication protocols by computer manufacturers in the early days of computing, preventing computers made by different manufacturers from being connected to each other. Also called closed architecture.

Prospecting The part of personal contact selling in which the salesperson identifies potential customers.

Protocol A collection of rules for formatting, ordering, and error-checking data sent across a network.

Proxy bid In an electronic auction, a predetermined maximum bid submitted by a bidder.

Proxy server firewall A firewall that communicates with the Internet on behalf of the trusted network.

Psychographic segmentation The grouping of customers by variables such as social class, personality, or their approach to life.

Public key One of a pair of mathematically related numeric keys, it is used to encrypt messages and is freely distributed to the public.

Public marketplace A vertical portal that is open to new buyers and sellers just entering an industry.

Public network An extranet that allows the public to access its intranet or when two or more companies link their intranets.

Public-key encryption The encoding of messages using two mathematically related but distinct numeric keys.

Purchasing card (p-card) Payment cards that give individual managers the ability to make multiple small purchases at their discretion while providing cost tracking information to the procurement office.

Racketeering Unlawful activities conducted by a highly organized, disciplined association for profit. Also called organized crime.

Radio frequency identification device (RFID) Small chips that include radio transponders; they can be used to track inventory as it moves through an industry value chain.

Rational branding An advertising strategy that substitutes an offer to help Web users in some way in exchange for their viewing an ad.

Reintermediation The introduction of a new intermediary into a value chain.

Remote server administration Control of a Web site by an administrator from any Internet-connected computer.

Repeat visits Subsequent visits a Web site visitor makes to a particular page.

Repeater A transmitter-receiver device used in a fixed-point wireless network to forward a radio signal from the ISP to customers. Synonymous with transceiver.

Replenishment purchasing Direct materials purchasing in which the company negotiates long-term contracts for most of the materials that it will need. Also called contract purchasing.

Request header The part of an HTTP message from a client to a server that contains additional information about the client and more information about the request.

Request line The part of an HTTP message from a client to a server that contains a command, the name of the target resource (without the protocol or domain name), and the protocol name and version.

Request message The HTTP message that a Web client sends to request a file or files from a Web server.

Reserve price (reserve) The minimum price a seller will accept for an item sold at auction.

Resource description framework A set of standards for XML syntax.

Response header field In a client/server transmission, it follows the response header line and returns information describing the server's attributes.

Response header line The part of a message from a server to a client that indicates the HTTP version used by the server, status of the response, and an explanation of the status information.

Response message The reply that a Web server sends in response to a client request.

Response time The amount of time a server requires to process one request.

Retained customer A customer who returns to a site one or more times after making his or her first purchase.

Retention costs The costs of inducing customers to return to a Web site and buy again.

Return on investment (ROI) A method for evaluating the potential costs and benefits of a proposed capital investment.

Revenue model The combination of strategies and techniques that a company uses to generate cash flow into the business from customers.

Reverse auction (seller-bid auction) A type of auction in which sellers bid prices for which they are willing to sell items or services.

Reverse bid The process in which an auction customer seeks products by describing an item or service in which he or she is interested, and then entertains responses from merchants who offer to supply the item at a particular price.

Reverse link checker A Web site management program that checks on sites with which a company has entered a link exchange program and ensures that link exchange partners are fulfilling their obligation to include a link back to the company's Web site.

Rich media ad A Web ad that generates graphical activity that "floats" over the Web page itself instead of opening in a separate window. Also called an active ad.

Rich media objects Programming components of attention-grabbing Web banner ads.

Roaming The shifting of Wi-Fi devices from one WAP to another without requiring intervention by the user.

Robot (bot, spider, crawler) A program that automatically searches the Web to find Web pages that might be interesting to people.

Router A computer that determines the best way for data packets to move forward to their destination.

Router computers (routing computers) The computers that decide how best to forward each packet of information as it travels on the Internet to its destination. Synonymous with gateway computers and routers.

Routing algorithm The program used by a router to determine the best path for data packets to travel.

Routing table Synonymous with configuration table, which is information about connections that lead to particular groups of routers, specifications on which connections to use first, and rules for handling instances of heavy packet traffic and network congestion.

Scalable A system's ability to be adapted to meet changing requirements.

Scaling problem The exponential increase in cost that results from the expansion of a private network.

Scrip A limited-use digital or paper value store issued by a private company rather than a government. It generally must be exchanged for goods or services with the company that issued it and usually cannot be exchanged for cash.

Sealed-bid auction An auction in which bidders submit their bids independently and are usually prohibited from sharing information with each other.

Search engine Web software that finds other pages based on key word matching.

Search engine optimization (search engine positioning, search engine placement) The combined art and science of having a particular URL listed near the top of search engine results.

Search engine placement broker A company that aggregates inclusion and placement rights on multiple search engines and then sells those combination packages to advertisers.

Search engine ranking The weighting of the factors that search engines use to decide which URLs will appear first on searches for a particular search term.

Search term sponsorship The option of purchasing a top listing on results pages for a particular set of search terms. Also called paid placement or sponsorship.

Search utility The part of a search engine that finds matching Web pages for search terms.

Second-price sealed-bid auction A type of auction in which bidders submit their bids independently and privately; the highest bidder wins the auction but pays only the amount bid by the second-highest bidder.

Secrecy The category of computer security that addresses the protection of data from unauthorized disclosure and confirmation of data source authenticity.

Secure envelope A security utility that encapsulates a message and provides secrecy, integrity, and client/server authentication.

Secure Sockets Layer (SSL) A protocol for transmitting private information securely over the Internet.

Security policy A written statement describing assets to be protected, the reasons for protecting the assets, the parties responsible for protection, and acceptable and unacceptable behaviors.

Segment Also called a market segment; a subset of a company's potential customer pool that has common demographic characteristics.

Self-hosting A system of Web hosting in which the online business owns and maintains the server and all its software.

Semantic Web A project developed by Tim Berners-Lee intended to blend technologies and information to create a next-generation Web that would result in words on Web pages being tagged (using XML) with their meanings.

Server A powerful computer dedicated to managing disk drives, printers, or network traffic.

Server architecture The different ways that servers can be connected to each other and to related hardware such as routers and switches.

Server farm A large collection of electronic commerce Web site servers.

Server-level filtering An e-mail content filtering technique in which the filtering software resides on the mail server.

Server software The software that a server computer uses to make files and programs available to other computers on the same network.

Server-side electronic wallet An electronic wallet that stores a customer's information on a remote server that belongs to a particular merchant or to the wallet's publisher.

Server-side scripting (server-side includes or server-side technologies) A Web page response approach in which programs running on the Web server create Web pages before sending them back to the requesting Web clients as parts of response messages.

Service mark A distinctive mark, device, motto, or implement used to identify services provided by a company.

Session cookie A cookie that exists only until you shut down your browser.

Session key A key used by an encryption algorithm to create cipher text from plain text during a single secure session.

Shared hosting A Web hosting arrangement in which the hosting company provides Web space on a server computer that also hosts other Web sites.

Shill bidder An individual employed by a seller or auctioneer who makes bids on behalf of the seller, sometimes artificially inflating an item's price. Shill bidders may be prohibited by the rules of a particular auction.

Shipping profile The collection of attributes that affect how easily a product can be packaged and delivered.

Shopping cart An electronic commerce utility that keeps track of selected items for purchase and automates the purchasing process.

Short message service (SMS) A protocol used to transmit short text messages to cell phones and other wireless devices.

Signature Any symbol executed or adopted for the purpose of authenticating a writing.

Signed (message or code) The status of a message or Web page when it contains an attached digital certificate.

Simple Mail Transfer Protocol (SMTP) A standardized protocol used by a mail server to format and administer e-mail.

Simple Object Access Protocol (SOAP) A message-passing protocol that defines how to send marked up data from one software application to another across a network.

Single-use card A payment card with disposable numbers, which gives consumers a unique card number that is valid for one transaction only.

Site map On a hierarchically structured Web site, a page that contains a map or listing of the Web pages in their hierarchical order.

Site sponsorship The opportunity for an advertiser to sponsor part or all of a Web site to promote its products, services, or brands. Site sponsorships are more subtle than banner or pop-up ads.

Skyscraper ad A large banner ad on the side of a Web page that remains visible as the user scrolls down through the page.

Small payment Any payment of less than \$10.

Smart card A plastic card with an embedded microchip that contains information about the card owner.

Sniffer program A program that taps into the Internet and records information that passes through a router from the data's source to its destination.

Snipe The act of placing a winning bid in an online auction at the last possible moment.

Sniping software Auction software that observes auction progress until the last second or two of the auction clock, then places a bid high enough to win the auction.

- Social network** A virtual community that exists for its own sake and is not focused on some separate group, organization, or set of interests.
- Software agent** A program that performs information gathering, information filtering, and/or mediation on behalf of a person or entity. Synonymous with intelligent software agent.
- Sourcing** The part of procurement devoted to identifying suppliers and determining the qualifications of those suppliers.
- Spam (unsolicited commercial e-mail or bulk mail)** Electronic junk mail.
- Spend** The total dollar amount of the goods and services that a company buys during a year.
- Spider** The first part of a search engine, it automatically and frequently searches the Web to find pages and updates its database of information about old Web sites.
- Sponsored top-level domain (sTLD)** A top-level domain for which an organization other than ICANN is responsible.
- Spot market** A loosely organized market within a specific industry.
- Spot purchasing** Direct materials purchasing that occurs within a spot market.
- Stakeholders** The various entities involved in a business; these include customers, suppliers, employees, stockholders, neighbors, and the general public.
- Standard Generalized Markup Language (SGML)** An old, complex text markup language used to create frequently revised documents that need to be printed in various formats.
- Start page** In a hierarchical Web page structure, the introductory page of a Web site. Synonymous with home page.
- Stateless connection** A connection between a client and server over the Internet in which each transmission of information is independent; no continuous connection is maintained.
- Static catalog** A simple list of products written in HTML and displayed on a Web page or a series of Web pages.
- Static page** A Web page that displays unchanging information retrieved from a disk.
- Statute of Frauds** State laws that specify that contracts for the sale of goods worth more than \$500 and contracts that require actions that cannot be completed within one year must be created by a signed writing.
- Statutory law** That part of British and U.S. law that comprises laws passed by elected legislative bodies.
- Steganography** The hiding of information (such as commands) within another piece of information.
- Stickiness** The ability of a Web site to keep visitors at its site and to attract repeat visitors.
- Sticky** The condition of having stickiness.
- Stored value card** Either an elaborate smart card or a simple plastic card with a magnetic strip that records currency balance, such as a prepaid phone, copy, subway, or bus card.
- Strategic alliance** The coordination of strategies, resources, and skill sets by companies into long-term, stable relationships with other companies and individuals based on shared purposes.
- Strategic business unit (business unit)** A unit within a company that is organized around a specific combination of product, distribution channel, and customer type.
- Strategic partners** The entities taking part in a strategic alliance.

Strategic partnership Synonymous with strategic alliance.

Style sheet A set of instructions used for Web page formatting. It is stored in a separate file and lets designers apply specific formatting styles to a page.

Subject-matter jurisdiction A court's authority to decide a dispute between entities based on the issue of dispute.

Subnetting The use of reserved private IP addresses within LANs and WANs to provide additional address space.

Supply alliances Long-term relationships among participants in the supply chain.

Supply chain The part of an industry value chain that precedes a particular strategic business unit. It includes the network of suppliers, transportation firms, and brokers that combine to provide a material or service to the strategic business unit.

Supply chain management (SCM) The process of taking an active role in working with suppliers and other participants in the supply chain to improve products and processes.

Supply chain management (SCM) software Software used by companies to coordinate planning and operations with their partners in the industry supply chains of which they are members.

Supply management Synonymous with procurement, which is the business activity that includes all purchasing activities plus the monitoring of all elements of purchase transactions.

Supply web An industry value chain that includes many participants that are interconnected in a web or network configuration.

Supporting activities Secondary activities that back up primary business activities. These include human resource management, purchasing, and technology development.

SWOT analysis Evaluation of the strengths and weaknesses of a business unit, and identification of the opportunities presented by the markets of the business unit and threats posed by competitors of the business unit.

Symmetric connection An Internet connection that provides the same bandwidth in both directions.

Symmetric encryption The encryption of a message using a single numeric key to encode and decode data. Synonymous with private-key encryption.

Systems administrator A member of an electronic commerce team who understands the server hardware and software and is responsible for the system's reliable and secure operation.

T1 High-bandwidth telephone company connections that operate at 1.544 Mbps.

T3 High-bandwidth telephone company connections that operate at 44.736 Mbps.

TCP/IP The set of protocols that provide the basis for the operation of the Internet. The TCP protocol includes rules that computers on a network use to establish and break connections. The IP protocol determines routing of data packets.

Technology-enabled customer relationship management Synonymous with technology-enabled relationship management.

Technology-enabled relationship management The business practice of obtaining detailed information about a customer's behavior, preferences, needs, and buying patterns and using that information to set prices, negotiate terms, tailor promotions, add product features, and provide other customized interactions.

Teergrubing A antispamming approach in which the receiving computer launches a return attack against the spammer, sending e-mail messages back to the computer that originated the suspected spam.

Telecommuting An employment arrangement in which the employee logs in to the company computer from an off-site location through the Internet instead of traveling to an office.

Telework Synonymous with telecommuting.

Telnet A program that allows users to log on to a computer and access its contents from a remote location.

Telnet protocol The set of rules used by Telnet programs.

Terms of service (ToS) Rules and regulations intended to limit the Web site owner's liability for what a visitor might do with information obtained from the site.

Text markup language A language that specifies a set of tags that are inserted into the text.

Third-generation (3G) cell phone A cell phone that incorporates the latest transmission technologies to achieve data speeds of up to 2 Mbps and also uses the SMS protocol to send and receive text messages.

Third-party assurance provider An independent organization that assures privacy policies of Web sites.

Third-party cookie A cookie that originates on a Web site other than the site being visited.

Third-party logistics (3PL) provider A transportation or freight company that operates all or most of a customer's material movement activities.

Threat An act or object that poses a danger to assets.

Three-tier architecture A client/server architecture that builds on the two-tier architecture by adding applications and their associated databases that supply non-HTML information to the Web server on request.

Throughput The number of HTTP requests that a particular hardware and software combination can process in a unit of time.

Tier-one suppliers The capable suppliers that work directly with and have long-term relationships with businesses.

Tier-three suppliers Suppliers that provide components and raw materials to tier-two suppliers.

Tier-two suppliers Suppliers that provide components and raw materials to tier-one suppliers.

Top-level domain (TLD) The last part of a domain name; the most general identifier in the name.

Tort An action taken by a legal entity that causes harm to another legal entity.

Total cost of ownership (TCO) Business activity costs including the costs of hiring, training, and paying the personnel who will design the Web site, write or customize the software, create the content, and operate and maintain the site. TCO also includes hardware and software costs.

Touchpoint Online and offline customer contact points.

Touchpoint consistency The provision of similar levels and quality of service in all of a company's interactions with its customers, whether those interactions occur in person, on the telephone, or online.

Tracert A route-tracing program that sends data packets to every computer on the path (Internet) between one computer and another computer and clocks the packets' round-trip times, providing an indication of the time it takes a message to travel from one computer to another and back, pinpointing any data traffic congestion, and ensuring that the remote computer is online.

Trade name The name (or a part of that name) that a business uses to identify itself.

Trademark A distinctive mark, device, motto, or implement that a company affixes to the goods it produces for identification purposes.

Trademark dilution The reduction of the distinctive quality of a trademark by alternative uses.

Trading partners Businesses that engage in EDI with one another.

Transaction An exchange of value.

Transaction costs The total of all costs incurred by a buyer and seller as they gather information and negotiate a transaction.

Transaction processing Processes that occur as part of completing a sale; these include calculation of any discounts, taxes, or shipping costs and transmission of payment data (such as a credit card number).

Transaction sets Formats for specific business data interchanges using EDI.

Transaction taxes Sales taxes, use taxes, excise taxes, and customs duties that are levied on the products or services that a company sells or uses.

Transceiver A transmitter-receiver device used in a fixed-point wireless network to forward a radio signal from the ISP to customers. Synonymous with repeater.

Transmission Control Protocol See TCP/IP.

Trial visit The first visit a Web site visitor makes to a particular page.

Trigger word A key word used to jog the memory of visitors and remind them of something they want to buy on the site.

Triple Data Encryption Standard (3DES) A robust version of the Data Encryption Standard used by the U.S. government that cannot be cracked even with today's supercomputers.

Trojan horse A program hidden inside another program or Web page that masks its true purpose (usually destructive).

Trusted (network) A network that is within a firewall.

Two-tier client/server architecture A client/server architecture in which only a client and

server are involved in the requests and responses that flow between them over the Internet.

Ultimate consumer orientation A focus on the needs of the consumer who is at the end of an industry value chain.

Ultra Wideband A wireless communication technology that provides wide bandwidth (up to about 480 Mbps in current versions) connections over short distances (30 to 100 feet).

Uniform resource locator (URL) Names and abbreviations representing the IP address of a particular Web page. Contains the protocol used to access the page and the page's location. Used in place of dotted quad notations.

Universal Description, Discovery and Integration (UDDI) specification The set of protocols that identify locations of Web services and their associated WSDL descriptions.

Unsolicited commercial e-mail (UCE) Electronic junk mail that can include solicitations, advertisements, or e-mail chain letters. Also called spam or bulk mail.

Untrusted (network) A network that is outside a firewall.

Untrusted Java applet A Java applet that is not known to be secure.

Upload bandwidth Synonymous with upstream bandwidth.

Upstream bandwidth The connection that occurs when you send information from your connection to your ISP.

Upstream strategies Tactics that focus on reducing costs or generating value by working with suppliers or inbound logistics.

URL broker A business that sells or auctions domain names that it believes others will find valuable.

Usability testing The testing and evaluation of a company's Web site for ease of use by visitors.

Usage-based market segmentation Customizing visitor experiences to match the site usage behavior patterns of each visitor or type of visitor.

Use tax A tax levied by a state on property used in that state that was not purchased in that state.

Usenet (User's News Network) One of the first mailing lists; it allows subscribers to read and post articles within topic areas.

Value chain A way of organizing the activities that each strategic business unit undertakes to design, produce, promote, market, deliver, and support the products or services it sells.

Value system Synonymous with industry value chain.

Value-added bank (VAB) A bank that offers value-added network services for nonfinancial transactions.

Value-added network (VAN) An independent company that provides connection and EDI transaction forwarding services to businesses engaged in EDI.

Vertical integration The practice of an existing firm replacing one of its suppliers with its own strategic business unit that creates the supplied product.

Vertical portal (vortal) A vertically integrated Web information hub focusing on an individual industry.

Vicarious copyright infringement The violation of an organization's rights that occurs when a company capable of supervising the infringing activity fails to do so and obtains a financial benefit from the infringing activity.

Vickrey auction Synonymous with second-price sealed-bid auction. Named for William Vickrey, who won the 1996 Nobel Prize in Economics for his studies of the properties of this auction type.

Viral marketing Tactics that rely on existing customers to tell other persons—the company's prospective customers—about the products or services they have enjoyed using.

Virtual community An electronic gathering place for people with common interests.

Virtual company A strategic alliance occurring among companies that operate on the Internet.

Virtual host Multiple servers that exist on a single computer.

Virtual learning community A virtual community used for distance learning.

Virtual model A graphic image built from customer measurements and physical traits on which customers can try clothes. Typically found on sites selling clothing and accessories.

Virtual private network (VPN) A network that uses public networks and their protocols to transmit sensitive data using a system called "tunneling" or "encapsulation."

Virtual server Synonymous with virtual host.

Virus Software that attaches itself to another program and can cause damage when the host program is activated.

Visit The request of a Web site visitor for a page from a Web site.

Voice-grade line Telephone wiring that costs less than lines designed to carry data, is made of lower-grade copper, and was never intended to carry data. These lines can only carry limited bandwidth—usually less than 14 Kbps.

Warchalking The practice of placing a chalk mark on a building that has an easily entered wireless network.

Wardrivers Network attackers who drive around in cars using their wireless-equipped laptop computers to search for unprotected wireless network access points.

Warranty disclaimer A statement indicating that the seller will not honor some or all implied warranties.

Web See World Wide Web.

Web browser (Web browser software) Software that lets users read HTML documents and move from one HTML document to another using hyperlinks.

Web bug A tiny, invisible Web page graphic that provides a way for a Web site to place cookies.

Web catalog revenue model A revenue model of selling goods and services on the Web wherein the seller establishes a brand image that conveys quality and uses the strength of that image to sell through catalogs mailed to prospective buyers. Buyers place orders by mail or by calling the seller's toll-free telephone number.

Web client computer A computer that is connected to the Internet and used to download Web pages.

Web client software Software that sends requests for Web page files to other computers.

Web community Synonymous with virtual community.

Web directory A listing of hyperlinks to Web pages that is organized into hierarchical categories.

Web EDI EDI on the Internet.

Web graphics designer A person trained in art, layout, and composition who also understands how Web pages are constructed and who ensures that the Web pages are visually appealing, are easy to use, and make consistent use of graphics elements from page to page.

Web log (blog) A Web site on which people post their thoughts and invite others to add commentary.

Web programmer A programmer who designs and writes the underlying code for dynamic database-driven Web pages.

Web server A computer that receives requests from many different Web clients and responds by sending HTML files back to those Web client computers.

Web server software Software that makes files available to other computers on the Internet.

Web services A combination of software tools that let application software in one organization communicate with other applications over a network using the SOAP, UDDI, and WSDL protocols.

Web Services Description Language (WSDL) A language that describes the characteristics of the logic units that make up specific Web services.

White hat hackers Hackers who use their skills for positive purposes.

White list spam filter Software that looks for From addresses in incoming messages that are known to be good addresses.

Wide area network (WAN) A network of computers that are connected over large distances.

Wi-Fi (wireless ethernet, 802.11b, 802.11a, 802.11g, 802.11n) The most common wireless connection technology for use on LANs; it can communicate through a wireless access point connected to a LAN to become a part of that LAN.

Winner's curse A psychological phenomenon that causes bidders to become caught up in the excitement of competitive bidding and bid more than their private valuation.

Wire transfer Synonymous with electronic funds transfer, which is the electronic transfer of account exchange information over secure private communications networks.

Wireless access point (WAP) A device that transmits network packets between Wi-Fi-equipped computers and other devices that are within its range.

Wireless Application Protocol (WAP) A protocol that allows Web pages formatted in HTML to be displayed on devices with small screens, such as PDAs and mobile phones.

World Wide Web (Web) The subset of Internet computers that connects computers and their contents in a specific way, and that allows for easy sharing of data using a standard interface.

World Wide Web Consortium(W3C) A not-for-profit group that maintains standards for the Web.

Worm A virus that replicates itself on other machines.

Writing A tangible representation of the terms of a contract.

XML parser A program that can format an XML file so it can appear on the screen of a computer, a wireless PDA, a mobile phone, or other device.

XML vocabulary A set of XML tag definitions.

Yankee auction A type of English auction that offers multiple units of an item for sale and allows bidders to specify the quantity of items they want to buy.

Zombie A program that secretly takes over another computer for the purpose of launching attacks on other computers. Zombie attacks can be difficult to trace to their perpetrators.

Zombie farm A group of computers on which a hacker has planted zombie programs.