

Glossary

- 2D tag** Technology that makes it possible to interact with individuals via the devices closest to them and when they'd be most interested or responsive.
- 2G** Second-generation mobile network standard.
- 3G** Third-generation mobile network standard.
- 4G** Fourth-generation mobile network standard.
- 3GSM** Third-generation Global System for Mobile Communications Services.
- Acceptable use policy (AUP)** Policy that informs users of their responsibilities, acceptable and unacceptable actions, and consequences of noncompliance.
- Access control** Management of who is allowed access and who is not allowed access to networks, data files, applications, or other digital resources.
- Adaptability** The ability to adjust the design of the supply chain to meet structural shifts in markets and modify supply network strategies, products, and technologies.
- Adaptive enterprise** An organization that can respond properly and in a timely manner to changes in the business environment.
- Ad hoc report** Unplanned reports generated on request to provide more information about a situation, problem, or opportunity.
- Administrative controls** Deal with issuing guidelines and monitoring compliance with the guidelines, policies, and procedures.
- Adoption process** A process that occurs over time and passes through five stages: (1) acquire knowledge, (2) persuade, (3) decide, (4) implement, and (5) confirm.
- Advergaming** The practice of using computer games to advertise a product, an organization, or a viewpoint.
- Adware** Software that automatically displays advertisements while running a program.
- Affiliate marketing** An arrangement whereby a marketing partner (a business, an organization, or even an individual) refers consumers to the selling company's Web site.
- Agile enterprise** A firm that can identify and capture opportunities more quickly than its rivals.
- Agility** An EC firm's ability to capture, report, and quickly respond to changes happening in the marketplace.
- AJAX (Asynchronous JavaScript)** A group of technologies that create Web pages that respond to users' actions without requiring the entire page to reload.
- Algorithm** A mathematical rule for solving a problem; a predetermined set of rules used to solve a problem in a finite number of steps.
- Alignment** The ability to create shared incentives that align the interests of businesses across the supply chain.
- Android OS.** Google/Open Hardset Alliance mobile OS.
- Anti-malware technology** Tool that detects malicious code and prevents users from downloading them.
- Application controls** Safeguards that are intended to protect specific applications.
- Application development 2.0.** A new application development process that involves constant interaction with users and provides developers with almost immediate notification of bugs and users' desires.
- Applications portfolio** Major information systems applications, such as customer order processing, human resource management, or procurement, that have been or are to be developed.
- Application program** A set of computer instructions written in a programming language, the purpose of which is to support a specific task or business process or another application program.
- Application Programming Interfaces (APIs)** A toll that allows programs to talk to or interact with one another.
- Artificial intelligence (AI)** The branch of computer science that is concerned with making computers behave and "think" like humans.
- Asset** Resource with recognized value that is under control of an individual or organization.
- Attribute** Characteristic describing an entity. Also known as a *field*.
- Auction** A competitive process in which either a seller solicits consecutive bids from buyers or a buyer solicits bids from sellers, and prices are determined dynamically by competitive bidding.
- Audit or Auditing** Investigation that is an important part of any control system.
- Augmented reality** An app that involves computer-generated graphic images superimposed over photos of real things.
- Automated decision support (ADS)** Rule-based systems that automatically provide solutions to repetitive managerial problems.
- Automatic crash notification (ACN)** Still-experimental device that would automatically notify police of the location of an ACN-equipped car involved in an accident.
- Available-to-promise (ATP)** A business function that provides data about resource availability and delivery dates to keep customers informed of their orders' status.
- Avatar** A cyberbody that a user creates when using an online 3-D virtual world.
- B2B gateway** A Suite of software products that support internal and external integration and business processes.
- Back-end (or back-office) operations** The activities that support fulfillment of sales, such as accounting and logistics.
- Balanced scorecard** A performance measurement approach that links business goals to performance metrics.
- Balanced scorecard methodology** Framework for defining, implementing, and managing an enterprise's business strategy by linking objectives with factual measures.
- Bandwidth** A measure of the speed at which data is transmitted.
- Barriers to entry** How easy or difficult it is to enter an industry.
- Batch processing** Processing system that processes inputs at fixed intervals as a file and operates on it all at once; contrasts with *online* (or *interactive*) processing.
- Behavior-oriented chargeback** Accounting system that sets IT service costs in a way that encourages usage consistent with organizational objectives, even though the charges may not correspond to actual costs.
- Benchmarks** Objective measures of performance, often available from industry trade associations.
- Biometric control** Automated method of verifying the identity of a person, based on physical or behavioral characteristics.
- Bit** The smallest unit of data a computer can process. Either a 0 or a 1.
- BitTorrent tracker** Server used in the communication, usually of very large files, between peers using the BitTorrent protocol.
- Blackberry OS** Made by Research in Motion. This is currently the dominant smart phone OS in the U.S.
- Blindspot** Areas in which managers fail to notice or to understand important information.

- Blog** Web log where users post information for others to read.
- Blogsphere** Blogs that exist together with similar interests as a connected community.
- Bluetooth** Chip technology that enables voice and data communications between many wireless devices through low power, short-range, digital two-way radio frequency.
- Botnet** Collection of computers infected by software robots, or bots.
- BPM mashup** Preconfigured, ready-to-go integrations between different business software packages.
- Brick-and-mortar organizations** Organizations in which the product, the process, and the delivery agent are all physical.
- Broadband** Short for broad bandwidth. A measure of a network's capacity or throughput.
- Buffer stock** Extra inventory in case of unexpected events. Also called *safety stock*.
- Bullwhip effect** Phenomenon that occurs when companies significantly cut or add inventories.
- Business activity monitoring (BAM)** A message-based, event-driven tool that allows business users to link KPIs (key performance indicators) associated to the process being monitored on a real-time basis and provides relevant information via dashboards.
- Business analytics** Provides models, which are formulas or algorithms and procedures to BI.
- Business architecture** Organizational plans, visions, objectives, and problems, and the information required to support them.
- Business case** A written document that is used by managers to justify funding for a specific investment and also to provide the bridge between the initial plan and its execution.
- Business continuity plan** Plan that outlines the process by which businesses should recover from a major disaster. Also known as a *disaster recovery plan*.
- Business impact analysis (BIA)** A method or exercise to determine the impact of losing the support or availability of a resource.
- Business intelligence (BI)** Category of applications for gathering, storing, analyzing, and providing access to data to help enterprise users make better decisions.
- Business record** A document that records business dealings such as contracts, research and development, accounting source documents, memos, customer/client communications, and meeting minutes.
- Business model** A method by which a company generates revenue to sustain itself.
- Business network** A group of people who have some kind of commercial relationship. For example, the relationships between sellers and buyers, buyers among themselves, buyers and suppliers, and colleagues and other colleagues.
- Business performance management (BPM)** A methodology for measuring organizational performance, analyzing it through comparison to standards, and planning how to improve it.
- Business process** A collection of activities performed to accomplish a clearly defined goal.
- Business process management (BPM)** A popular management technique that includes methods and tools to support the design, analysis, implementation, management, and optimization of operational business processes.
- Business process management suites** BPM software where you can graphically *compose* a process model, *optimize* it through simulation and analysis, and *execute* it on a built-in process engine.
- Business process modeling** An activity similar to drafting a blueprint for a house; it includes techniques and activities used as part of the larger business process management discipline.
- Business process outsourcing (BPO)** The process of hiring another company to handle business activities.
- Business process reengineering** The radical redesign of an organization's business, where one takes a current process and makes changes to increase its efficiency and create new processes.
- Business process reengineering (BPR)** A methodology in which an organization fundamentally and radically changes its business processes to achieve dramatic improvement.
- Business process utilities (BPUs)** Outsourced business process services for standardized processes.
- Business records** Records of business dealings, such as contracts, research and development, accounting source documents, memos, customer/client communications, and meeting minutes.
- Business service management (BSM)** A strategy and an approach for linking key IT components to the goals of the business. It enables you to understand and predict how technology impacts the business and how business impacts the IT infrastructure.
- Business strategy** Defines the business objectives and long-term direction of an organization.
- Business-to-business EC (B2B)** E-commerce in which both the sellers and the buyers are business organizations.
- Business-to-business-to-consumers (B2B2C) EC** E-commerce in which a business sells to a business but delivers the product or service to an individual consumer.
- Business-to-consumers (B2C) EC** E-commerce in which the sellers are organizations and the buyers are individuals; also known as *e-tailing*.
- Business-to-employees (B2E) EC** A special type of intrabusiness e-commerce in which an organization delivers products or services to its employees.
- Buy-side marketplace** B2B model in which organizations buy needed products or services from other organizations electronically, often through a reverse auction.
- Byte** A group of eight bits. Represents a single character.
- Champion** The person who will promote the benefits of the new system across different levels of the organization on an ongoing basis.
- Change management** A structured approach to transition individuals, teams, and organizations from a current state to a desired future state, which includes managing change as part of systems development to avoid user resistance to business and system changes.
- Change process** A structured technique to effectively transition groups or organizations through change.
- Channel conflict** Possible conflicts between the online selling channel and the traditional physical channel may be internal (e.g., regarding pricing or advertisement), or between a company that wants to sell direct to customers and its existing distributors.
- Channel systems (in marketing)** A network of the materials and product distribution systems involved in the process of getting a product or service to customers.
- Chargeback** System that treats the IT function as a service bureau or utility, charging organizational subunits for IT services with the objective of recovering IT expenditures.
- Chief technology officer (CTO)** One who evaluates the newest and most innovative technologies and determines how they can be applied for competitive advantage.
- Circuit switching** Older technology that was used for telephone calls. A circuit cannot be used by any other call until the connection has ended.
- Click-and-mortar organizations** Organizations that do business in both the physical and digital dimensions.
- Clickstream data** Data generated by visitors' behavior on a company's Web site.
- Client/server network** Consists of user PCs, called *clients*, linked to high-performance computers, called *servers*, which provide software, data, or computing services over a network.

- Cloud computing** Technology that is rented or leased on a regular, or as-needed basis.
- COBIT (Control Objectives for Information and Related Technologies)** An internationally accepted IT governance and control framework that aligns IT business objectives, delivering value and managing associated risks.
- Collaborative commerce (c-commerce)** E-commerce in which business partners collaborate electronically.
- Collaborative planning, forecasting, and replenishment (CPFR)** Project in which suppliers and retailers collaborate in their planning and demand forecasting to optimize flow of materials along the supply chain.
- Commodity** Basic things that companies need in order to function, like electricity and buildings.
- Comparison shopping engine** Search engine that compares prices and finds great deals for certain brands and products.
- Compatibility** The degree to which the new system is perceived to fit with the existing values, past experiences, and needs of potential adopters.
- Competitive advantage** An advantage a company has over its competitors, which is gained by providing consumers with greater value through product or service offerings.
- Competitive forces model** A business framework devised by Michael Porter, depicting five forces in a market (e.g., bargaining power of customers), used for analyzing competitiveness.
- Complexity** The degree to which the new system is perceived to be difficult to understand and use, measured on a continuum from easy to difficult.
- Computer-based information system (CBIS)** Information system that includes a computer for some or all of its operation.
- Computer cluster** A group of computers linked via a LAN and working together to form the equivalent of a single computer.
- Computer-integrated manufacturing (CIM)** Integrates several computerized systems, such as CAD, CAM, MRP, and JIT, into a whole, in a factory.
- Computer systems failures** Failures due to poor manufacturing, defects, or outdated or poorly maintained networks.
- Consumer-to-business (C2B) EC** E-commerce in which consumers make known a particular need for a product or service, and suppliers compete to provide the product or service to consumers; an example is Priceline.com.
- Consumer-to-consumer (C2C) EC** E-commerce in which an individual sells products or services to other individuals (not businesses).
- Content indexing** A searchable index of all content.
- Content marketing** A type of marketing where valuable information is shared with current or prospective clients. Blogs are a key tool of this.
- Context Defines** the intent of the user; for example, trying to purchase music, find a job, or share memories with friends and family.
- Context awareness** Capturing a broad range of contextual attributes to better understand what the consumer needs, and what products or services he or she might possibly be interested in.
- Contextual computing** Enhancement of the computational environment for each user at each point of computing.
- Converged network** Powerful network architecture that enables enterprisewide integration of voice, data, video, and other communication applications.
- Corporate governance** Rules and processes ensuring that the enterprise adheres to accepted ethical standards, best practices, and laws.
- Corporate procurement** Buying products and services for operational and functional needs. Also called *corporate purchasing*.
- Cost-benefit analysis** Study that helps in decisions on IT investments by determining if the benefits (possibly including intangible ones) exceed the costs.
- Cracker** A *malicious hacker* who may represent a serious problem for a corporation.
- Crime server** Server used to store stolen data for use in committing crimes.
- Critical path** Activities or tasks that must start and finish on schedule or else the project completion will be delayed unless action is taken to expedite one or more critical tasks.
- Critical path method (CPM)** The purpose of this method of project management is to recognize which activities are on the critical path so that you know where to focus your efforts.
- Critical response activities** The major activities used by organizations to counter *business pressures*.
- Critical success factors (CSFs)** The most essential factors that must go right or be closely tracked in order to ensure an organization's survival and success.
- Critical task** Each task on the critical path.
- Cross-border data transfer** The flow of corporate data across nations' borders.
- Crowdsourcing** A model of problem solving and idea generation that marshals the collective talents of a large group of people.
- CSS (Cascading Style Sheets)** A style sheet language used to enhance the appearance of Web Pages written in a markup language.
- Customer churn** A customer switches to a competitor's service.
- Customer relationship management (CRM)** The entire process of maximizing the value proposition to the customer through all interactions, both online and traditional. Effective CRM advocates one-to-one relationships and participation of customers in related business decisions.
- Customization** Creation of a product or service according to the buyer's specifications.
- Cybercriminals** People who commit crimes using the Internet.
- Cyberbanking** Various banking activities conducted electronically from home, a business, or on the road instead of at a physical bank location.
- Dashboard** A BI tool that provides a comprehensive, at-a-glance view of corporate performance with graphical presentations, resembling a dashboard of a car. These graphical presentations show performance measures, trends, and exceptions, and integrate information from multiple business areas.
- Data** The raw material from which information is produced.
- Database** Repository of enterprise data that business applications create or generate, such as sales, accounting, and employee data. An organized logical grouping of related files.
- Database management systems (DBMS)** Programs used to create, manage, and access databases.
- Data centers** Facilities containing mission-critical ISs and components that deliver data and IT services to the enterprise.
- Data entity** Anything real or abstract about which a company wants to collect and store data, such as customer, vendor, product, or employee.
- Data infrastructure** Fundamental structure of a system that determines how it functions and how flexible it is to meet future requirements.
- Data item** An elementary description of things, events, activities, and transactions that are recorded, classified, and stored, but not organized to convey any specific meaning; can be numeric, alphanumeric, figures, sounds, or images.
- Data latency** Technically, the speed in which data is captured is referred to as data latency. It is a measure of data "freshness," specifically data that are less than 24 hours old.
- Data management** Structured approach for capturing, storing, processing, integrating, distributing, securing, and archiving data effectively throughout their life cycle.

- Data mart** Small data warehouse designed to support a department or SBU.
- Data mining** Process of analyzing data from different perspectives and summarizing it into useful information (e.g., information that can be used to increase revenue, cuts costs, or both).
- Data quality** The degree of data accuracy, accessibility, relevance, timeliness, and completeness.
- Data silo** An IS that is incapable of exchanging information with other related systems within an organization.
- Data synchronization** Integrating, matching, or linking data from disparate sources.
- Data tampering** An attack wherein someone enters false, fabricated, or fraudulent data into a computer, or changes or deletes existing data.
- Data visualization** Ways to depict data to make it easier for users to understand data.
- Data warehouse** A specialized type of database that is used to aggregate data from transaction databases for data analysis purposes, such as identifying and examining business trends, to support planning and decision making. See *enterprise data warehouse*.
- Data workers** Clerical workers who use, manipulate, or disseminate information, typically using document management, workflow, e-mail, and coordination software to do so.
- Decision support system (DSS)** Computer-based information system that combines models and data to solve semistructured and some unstructured problems with intensive user involvement.
- Dehumanization** Feeling a loss of identity because of computerization.
- Demand-driven supply networks (DDSNs)** Networks driven from the front by customer demand. Instead of products being pushed to market, they are pulled to market by customers.
- Demand management** Knowing or predicting what to buy, when, and how much.
- Denial of Service (DoS) attack** Occurs when a server or Web site receives a flood of traffic—much more traffic or requests for service than it can handle, causing it to crash.
- Deploy** To install, test, and implement an IS or application.
- Desktop purchasing** E-procurement method in which suppliers' catalogs are aggregated into an internal master catalog on the buyer's server for use by the company's purchasing agents.
- Digital economy** Another name for today's Web-based, or Internet, economy.
- Digital enterprise** A new business model that uses IT in a fundamental way to accomplish one or more of three basic objectives: reach and engage customers more effectively, boost employee productivity, and improve operating efficiency. It uses converged communication and computing technology in a way that improves business processes.
- Digital supply chain** A supply chain that is managed electronically, usually with Web-based software (also known as E-supply chain).
- Direct file access method** Uses the key field to locate the physical address of a record. The most appropriate access method when individual records must be located directly and rapidly for immediate processing, when a few records in the file need to be retrieved at one time, and when the required records are found in no particular order.
- Direct file organization** Records can be accessed directly regardless of their location on the storage medium.
- Direct procurement** Procuring materials to produce finished goods.
- Dirty data** Poor quality data.
- Disaster avoidance** Approach oriented toward prevention of a problem or crisis.
- Discovery** Process of gathering information in preparation for trial, legal or regulatory investigation, or administrative action as required by law.
- Disintermediation** The elimination of intermediaries in EC; removing the layers of intermediaries between sellers and buyers. Effective for technological forecasting and for forecasting involving sensitive issues.
- Disruptors** Companies that introduce a significant change in their industries, thus causing disruption in business operations.
- Document management** Automated control of imaged and electronic documents, page images, spreadsheets, voice and e-mail messages, word processing documents, and other documents through their life cycle within an organization, from initial creation to final archiving or destruction.
- Document management systems (DMS)** Hardware and software to manage and archive electronic documents and to convert paper documents into e-documents, and then to index and store them in an organized way.
- Dot-com era (bubble)** Period from 1995–2005 when number of Internet users sharply increased and during which countless Internet companies rode an enormous wave of enthusiasm.
- Download speed** How quickly data can be received from the Internet or other network, or how fast a connection can deliver data to a computer or mobile device.
- Drawing tools** A way to help demonstrate a business process using diagrams or charts, which works best in conjunction with text-based tools.
- DWY (Driving While Yakking)** Risky cell phone usage while driving.
- E-commerce** Process of buying, selling, transferring, or exchanging products or services or information via the public Internet or private corporate networks.
- E-community** Citizens, audiences, and business partners.
- E-content** Supplied by content providers.
- Economic order quantity (EOQ)** Inventory model that is used to determine when and how much to order of stock.
- e-CRM (electronic CRM)** The use of Web browsers and other electronic touch points to manage customer relationships. E-CRM covers a broad range of topics, tools, and methods, ranging from the proper design of digital products and services to pricing and to loyalty programs.
- EDGE (Enhanced Data for Global Evolution)** A type of network standard (3G).
- E-government** The use of e-commerce to deliver information and public services to citizens, business partners, and suppliers of government entities, and those working in the public sector.
- E-infrastructure** Technical consultants, system developers, integrators, hosting, security, wireless, and networks.
- Electronic bartering** The electronically supported exchange of goods or services without a monetary transaction.
- Electronic commerce (e-commerce, EC)** The process of buying, selling, transferring, or exchanging products, services, or information via computer networks, including the Internet; business conducted online.
- Electronic data interchange (EDI)** The electronic transfer of specially formatted standard business documents, such as bills, orders, and confirmations, sent between business partners.
- Electronic funds transfer (EFT)** Electronic payments and collections.
- Electronic mall** A collection of individual shops under one Internet address.
- Electronic market (e-market)** A network of interactions and relationships over which products, services, information, and payments are exchanged.
- Electronic Product Environmental Assessment Tool (EPEAT)** A searchable database of computer hardware that meets a strict set of environmental criteria.
- Electronic records** Archived electronic documents that are not subject to alteration.

- Electronic records management (ERM)** An infrastructure that helps reduce automated expensive time-intensive and manual processes, and consolidates multiple Web sites onto a single platform.
- Electronic retailing (e-tailing)** The direct sale of products and services through electronic storefronts or electronic malls, usually designed around an electronic catalog format and/or auctions.
- Electronic storefront** The Web site of a single company, with its own Internet address, at which orders can be placed.
- E-market** An online marketplace where buyers and sellers meet to exchange goods, services, money, or information.
- Employee relationship management (ERM)** The use of Web-based applications to streamline the human resources process and to better manage employees.
- End-user development** (also known as **end-user computing**) The development and use of ISs by people outside the IS department.
- Enhanced messaging service (EMS)** An extension of SMS capable of simple animation, tiny pictures, and short tunes.
- Enterprise 2.0** Technologies and business practices that free the workforce from the constraints of legacy communication and productivity tools such as e-mail. It provides business managers with access to the right information at the right time through a web of interconnected applications, services, and devices.
- Enterprise 2.0** The strategic integration of social computing tools (e.g., blogs, wikis) into enterprise business processes.
- Enterprise application integration (EAI)** A middleware that connects and acts as a go-between for applications and their business processes.
- Enterprise content management (ECM)** ECM is a comprehensive approach to electronic document management, Web content management, digital asset management, and electronic records management (ERM).
- Enterprise data warehouse (EDW)** A data repository of organizational data that is organized, analyzed, and used to enable more informed decision making and planning. See *data warehouse*.
- Enterprise portal** Set of software applications that consolidate, manage, analyze, and transmit information to users through a standardized Web-based interface.
- Enterprise reporting systems** Provide standard, ad hoc, or custom reports that are populated with data from a single trusted source to get a *single version of the truth*.
- Enterprise resource planning (ERP)** Software that integrates the planning, management, and use of all resources in the entire enterprise; also called *enterprise systems*.
- Enterprise risk management (ERM)** A model for IT governance that is risk-based integrating internal control, the Sarbanes-Oxley Act mandates, and strategic planning.
- Enterprise search** Offers the potential of cutting much of the complexity accumulated in applications and intranet sites throughout an organization.
- Enterprise social network** A social network within an enterprise that allows employees to communicate, collaborate, and set up virtual worlds in which they can meet like-minded colleagues within the company and exchange ideas with them to improve productivity.
- Enterprise Web 2.0 (Enterprise 2.0, or E 2.0)** The application of Web 2.0 technologies in the enterprise.
- Environmental hazard** Hazards such as volcanoes, earthquakes, blizzards, flood, power failures or strong fluctuations, fires, defective air conditioning, explosions, radioactive fall-out, and water cooling system failures.
- E-process** Payments and logistics.
- E-procurement** Purchasing by using electronic support.
- E-reader** Device that looks similar to slate tablet computers, but is used primarily as a way for users to read electronic books.
- Ergonomics** The science of adapting machines and work environments to people.
- E-services** CRM, PRM, and directory services.
- E-sourcing** Electronic procurement of products.
- Ethics** A branch of philosophy that deals with what is considered to be right and wrong.
- ETL** (Extract, Transform, and Load) Extraction, transformation, and loading of data from a database into a data warehouse.
- ETL tools** Tools that extract relevant customer data from the various data silos, transform the data into standardized formats, and then load and integrate the data into an operational data store or system.
- EV-DO (Evolution, Data Only)** A type of network standard (3G). Third upgrade to CDMA.
- EV-DV (Evolution, Data and Voice)** A type of network standard (3G). Most advanced CDMA upgrade.
- Event-driven alerts** Real-time alerts or warnings that are broadcast when a predefined event, or unusual event, occurs.
- E-wallets (digital wallets)** A software component in which a user stores secured personal and credit card information for one-click reuse.
- Exception report** Report generated only when some unusual event or deviation has occurred.
- Expected value (EV)** A weighted average, computed by multiplying the size of a possible future benefit by the probability of its occurrence.
- Expense management automation (EMA)** Systems that automate data entry and processing of travel and entertainment expenses.
- Expert (or expertise) location systems (ELs)** Interactive computerized systems that help employees find and connect with colleagues who have expertise required for specific problems—whether they are across the country or across the room—in order to solve specific, critical business problems in seconds.
- Explicit knowledge** The knowledge that deals with objective, rational, and technical knowledge (data, policies, procedures, software, documents, etc.).
- External supply chain** Business or supply chain partners, such as customers or suppliers.
- Extract, transform, and load (ETL)** Process that moves data from multiple sources, reformats, cleanses, and loads them into another data warehouse or data mart for analysis or another operational system to support a business process.
- Extranet** Private, company-owned network that uses IP technology to securely share part of a business's information or operations with suppliers, vendors, partners, customers, or other businesses.
- Fiduciary responsibility** Legal and ethical obligation.
- Field** Characteristic describing an entity. Also known as an attribute.
- File** A collection of related records. Also called *data file*.
- Financial flow** The transfer of payments and financial arrangements, for example, billing payment schedules, credit terms, and payment via electronic funds transfer (EFT).
- Financial value chain management (FVCM)** The combination of financial analysis with operations analysis, which analyzes all financial functions in order to provide better financial control.
- Firewall** System or group of systems that enforces an access-control policy between two networks.
- Fixed-line broadband.** Either cable or DSL Internet connection.

- Foreign key** Field whose purpose is to link two or more tables together.
- Forward auction** An auction that sellers use as a selling channel to many potential buyers; the highest bidder wins the items.
- Four P's of implementation** Four widely accepted approaches that are usually used to implement an IT-based system; plunge, parallel, phased, and pilot.
- Front-office operations** The business processes, such as sales and advertising, that are visible to customers.
- Functionality** Entire set of capabilities of an IS or application.
- Gantt chart** A type of bar chart that illustrates a project schedule.
- Gateway** An entrance point that allows users to connect from one network to another.
- General controls** Protects the system regardless of the specific application.
- Geocoding** Process of finding geographic coordinates from other data, such as zip codes or addresses.
- Geographic information system (GIS)** Computer-based system that integrates GPS data onto digitized map displays.
- Giant global graph** Concept that illustrates the connections between people and/or documents and pages online.
- Global information systems** Interorganizational systems that connect companies located in two or more countries.
- Global positioning systems (GPS)** Wireless devices that use satellites to enable users to detect the position on earth of items (e.g., cars or people) the devices are attached to, with reasonable precision.
- Global sourcing** Occurs when companies purchase goods or services from sellers located anywhere in the world.
- Global warming** The upward trend in global mean temperature (GMT).
- Google Wave** A new type of platform consisting of e-mail, instant messaging, and documents.
- GSM (Global System for Mobile Communications)** Type of network standard (2G). Upgrades include GPRS, EDGE, UMTS, HSDPA.
- Government-to-business (G2B) EC** E-commerce in which a government does business with other governments as well as with businesses.
- Government-to-citizens (G2C) EC** E-commerce in which a government provides services to its citizens via EC technologies.
- Government-to-government (G2G) EC** E-commerce in which government units do business with other government units.
- Green computing** Initiative to conserve valuable natural resources by reducing the effect computer usage has on the environment.
- Green computing** Study and practice of eco-friendly computing resources; now a key concern of businesses in all industries—not just environmental organizations.
- Greenhouse effect** The holding of heat within the earth's atmosphere by certain GSGs—such as CO₂, methane, and nitrous oxide—that absorb infrared radiation (IR).
- Green IT** The development of effective programs for IT eco-efficiency and IT eco-innovation that drive improved financial results and measurable environmental sustainable information and communications technology systems.
- Green software** Software products that help cut fuel bills, save energy, or help comply with EPA requirements.
- Grid computing** The use of networks to harness the unused processing cycles of all computers in a given network to create powerful computing capabilities.
- Groundswell** A spontaneous movement of people using online tools to connect, take charge of their own experience, and get what they need from each other.
- Group decision support system (GDSS)** An interactive computer-based system that facilitates the solution of semistructured and unstructured problems when made by a group of decision makers by concentrating on the *process* and procedures during meetings.
- Group purchasing** The aggregation of purchasing orders from many buyers so that a volume discount can be obtained.
- Group work** Work done together by two or more people.
- Hacker** Someone who gains unauthorized access to a computer system. A criminal.
- Hotspot** A specific geographic location in which an access point provides public wireless service to mobile users.
- Hard ROI metric** A method for businesses to measure the hard return on investment by evaluating various data.
- HSDPA** High-speed downlink (or data) packet access that allows for data speeds up to 10 Mbps (megabits per second).
- HTML (Hypertext Markup Language)** Predominant language for Web pages. Provides a means to create structured documents by denoting structural semantics for text, such as headings, paragraphs, and lists, as well as for links, quotes, and other items.
- Human errors** Mistakes made due to untrained or unaware users.
- Hype-cycle** A useful tool developed by Gartner, Inc in 1995 that is used widely by organizations to identify and assess fruitful emerging technologies and help them decide when to adopt. It assesses the maturity, impact, and adoption speed of hundreds of technologies across a broad range of technology, application, and industry areas.
- Implementation** All organizational activities involved in the introduction, management, and acceptance of technology to support one or more organizational processes.
- Inbound logistics** Incoming materials are processed in this activity.
- Indexed sequential access method (ISAM)** File organization method that uses an index of key fields to locate individual records.
- Indirect procurement** Procuring materials and products for daily operational needs.
- Information** Data that have been organized so they have meaning and value to the recipient.
- Information flow** The movement of detailed data among members of the supply chain, for example, order information, customer information, order fulfillment, delivery status, and proof-of-delivery confirmation.
- Information infrastructure** The physical arrangement of hardware, software, databases, networks, and information management personnel.
- Information overload** The inability to cope with or process ever-growing amounts of data into our lives.
- Information quality** A subjective measure of the utility, objectivity, and integrity of gathered information based on its being complete, accurate, up-to-date, and fit for the purpose for which it is used.
- Information system (IS)** A physical process that supports an organization by collecting, processing, storing, and analyzing data, and disseminating information to achieve organizational goals.
- Information systems (IS) strategy** Defines *what* information, information systems, and IT architecture is required to support the business.
- Information technology (IT)** The technology component of an information system (a narrow definition); or the collection of the computing systems in an organization (the broad definition used in this book).
- Information technology architecture** High-level map or plan of the information assets in an organization; on the Web, it includes the content and architecture of the site.
- Information technology (IT)-business alignment** Degree to which the IT group understands the priorities of the business and expends its resources, pursues projects, and provides information consistent with these priorities.
- Information technology (IT) governance** Formally established statements that direct the policies regarding IT alignment with organizational goals and allocation of resources.
- Information technology (IT) strategic planning** Defines the IT (long-range) strategic plan, the IT medium-term plan, and the IT tactical plan.

- Information technology (IT) strategy** Defines the IT vision, *how* the infrastructure and services are to be delivered.
- Information technology (IT) vision** The longer-term direction for IT; defines the future concept of what IT should do to achieve the goals, objectives, and strategic position of the firm.
- In-house development** When systems are developed or other IT work is done in-house.
- Insourcing** Development and management of IT services within the organization.
- Intangible benefits** Benefits that are hard to place a monetary value on (e.g., greater design flexibility).
- Integrated Social Media (ISM)** Social media services that are integrated into social networks.
- Intellectual capital (intellectual assets)** The valuable knowledge of employees.
- Intelligent agents** Applications that have some degree of reactivity, autonomy, and adaptability to react to unpredictable attack situations. Also referred to as softbots or knowbots.
- Interactive marketing** Online marketing, facilitated by the Internet, by which marketers and advertisers can interact directly with customers, and consumers can interact with advertisers/vendors.
- Interactivity application** Applications connect, communicate, collaborate, and do commerce on-demand, in real-time, and at a distance.
- Internal control** Process designed to provide reasonable assurance of effective operations and reliable financial reporting.
- Internal control environment** Work atmosphere that a company sets for its employees.
- Internal supply chain** Internal functions that take place within a company.
- Internal threats** Threats from those within the organization, such as employees, contractors, and temporary workers.
- Internet protocol suite** Standard used with almost any network service consisting of the **Internet Protocol (IP)** and **Transport Control Protocol (TCP)**, or TCP/IP.
- Interoperability** Connectivity between devices. Refers to the ability to provide services to and accept services from other systems or devices.
- Interorganizational information systems (IOSs)** Communications systems that allow routine transaction processing and information flow between two or more organizations.
- Intrabusiness (intraorganizational) commerce** E-commerce in which an organization uses EC internally to improve its operations.
- Intranet** Network designed to serve the internal informational needs of a company, using Internet tools.
- Intrusion Detection System (IDS)** Technology tool that scans for unusual or suspicious traffic.
- Intrusion Prevention Systems (IPS)** Technology tool designed to take immediate action—such as blocking specific IP addresses—whenever a traffic-flow anomaly is detected.
- Inventory control** Maintaining optimal inventory levels by reordering the correct quantity at the right time.
- iOS** Apple's mobile OS.
- iPhone 3G** Apple's 3G version of the iPhone.
- IP network** Internet Protocol-based network that forms the backbone that is driving the merger of voice, data, video, and radio waves by digitizing content into packets that can be sent via digital networks.
- IP telephony** Voice communication over a network using the Internet Protocol. Also called VoIP.
- ISO 9000** Developed as a standard for business quality systems by the International Organization for Standardization (ISO). A key element of ISO 9000 is the identification of nonconforming processes and the development of a plan to prevent nonconforming processes from being repeated.
- IT applications** Specific systems and programs for achieving certain objectives.
- IT-business alignment** Refers to the degree to which the IT division understands the priorities of the business and spends its resources, pursues projects, and provides information consistent with these priorities.
- ITES (information technology-enabled services)** See *Business process outsourcing (BPO)*.
- IT governance** Supervision monitoring and control of an organization's IT assets.
- IT infrastructure** Provides the foundations for IT applications in the enterprise. It is shared by many applications throughout the enterprise and made to exist for a long time.
- IT performance management** Being able to predict and anticipate failures before it's too late.
- IT security** Protection of information, communication networks, and traditional and e-commerce operations to assure their confidentiality, integrity, availability, and authorized use.
- IT strategy** Defines what information, information systems, and IT architecture are required to support the business and how the infrastructure and services are to be delivered.
- IT strategic planning** Plans and strategies that support the business strategy and objective.
- JavaScript** An object-oriented language used to create apps and functionality on Web sites.
- Just-in-time (JIT)** An inventory scheduling system in which material and parts arrive at a work place when needed, minimizing inventory, waste, and interruptions.
- Keeling curve** The oscillating and upward line on a graph indicating the measurement of CO₂ gas in our atmosphere.
- Key performance indicators (KPIs)** Metrics that measure the actual performance of critical aspects of IT, such as critical projects and applications, servers, the network, and so forth, against predefined goals and objectives.
- Key performance indicators (KPI)** The quantitative expression of critically important metrics.
- Knowledge** Data and/or information that have been organized and processed to convey understanding, experience, accumulated learning, and expertise.
- Knowledge management (KM)** The process that helps organizations identify, select, organize, disseminate, and transfer important information and expertise that are part of the organization's memory and that may reside in unstructured form within the organization.
- Knowledge management system (KMS)** A system that organizes, enhances, and expedites intra- and inter-firm knowledge management; centered around a corporate knowledge base or depository.
- Knowledge workers** People who create and use knowledge as a significant part of their work responsibilities.
- Kotter's organizational transformation model** An eight-step process that organizations should follow in order to successfully transform an organization.
- Law of accelerating returns** This law suggests that the time interval between significant events grows shorter as time passes because technological change is exponential, not linear.
- Lean manufacturing** Demand-driven manufacturing, the objective of which is to remove waste of any kind from production.
- Legacy system** Application that has been used for a long period of time and that has been inherited from languages, platforms, and techniques used in earlier technologies.
- Lessons learned** An important step in wrapping up management of any implementation process, this step documents successes and failures in each systems development phase as well as the project as a whole.

- Lewin's three-stage change model** A simple change process model that consists of three stages of change; *unfreezing, change, (re)freezing*.
- Linux OS.** Linux mobile OS.
- Local area network (LAN)** Connects network devices over a relatively short distance. Capable of transmitting data at very fast rates, but operates in a limited area, such as an office building, campus, or home.
- Location-based commerce (l-commerce)** M-commerce transactions targeted to individuals in specific locations at specific times.
- Logistical system design** States what the system will do, using abstract specifications.
- Logistics** The operations involved in the efficient and effective flow and storage of goods, services, and related information from point of origin to point of consumption.
- Loyalty programs** Programs that recognize customers who repeatedly use the services (products) offered by a company (e.g., frequent flyers).
- LTE (Long-Term Evolution)** Type of network standard (4G). Developed by the Third Generation Partnership Project (3GPP).
- Malvertisement** Ads that when clicked redirect the user to a malicious Web site.
- Malware** Any unwanted software that exploits flaws in other software to gain illicit access.
- Management information systems (MISs)** Systems designed to provide past, present, and future routine information appropriate for planning, organizing, and controlling the operations of functional areas in an organization.
- Mashup** An application or Web page that pulls information from multiple sources, creating a new functionality.
- Mass Web attack** Web sites attacked by a malicious code.
- Master data entity** Main entities of a company, such as customers, products, suppliers, employees, and assets.
- Master data management (MDM)** The integration of data from various sources or enterprise applications to provide a more unified view of data.
- Master reference file** File that stores consolidated data from various data sources, which then feeds data back to the applications to create accurate and consistent data across the enterprise.
- Maverick buying** Buying done outside the established system.
- Mesh network** A type of wireless sensor network composed of motes, where each mote "wakes up" or activates for a fraction of a second when it has data to transmit and then relays those data to its nearest neighbor. So, instead of every mote transmitting its information to a remote computer at a base station, an "electronic bucket brigade" moves the data mote by mote until it reaches a central computer where it can be stored and analyzed.
- Metadata** Way of describing data so that it can be used by a wide variety of applications.
- Metric** A specific, measurable standard against which actual performance is compared.
- Micro-blogging** Sending messages up to 140 characters.
- Micropayments** Payment of small sums using a mobile device.
- Mission-critical** When business will grind to a halt if a company's legacy systems crash or stop working.
- Mission statement** Defines why an organization exists.
- Mobile banking** Carrying out banking transactions using mobile devices.
- Mobile broadband** Various types of wireless high-speed Internet access through a portable modem, telephone, or other device.
- Mobile commerce (m-commerce, m-business)** Any e-commerce done in a wireless environment, especially via the Internet.
- Mobile electronic payment system.** The various systems mobile devices use to purchase goods or services.
- Mobile enterprise** Enterprise that has the ability to connect and control suppliers, partners, employees, products, and customers from any location.
- Mobile government (m-government)** The wireless implementation of e-government applications mostly to citizens, but also to businesses.
- Mobile intelligence (MI)** Information access via mobiles that far exceed desktop or laptop information access.
- Mobile portal** A gateway to the Internet accessible from mobile devices; aggregates content and services for mobile users.
- Mobile social networking** Social networking where one or more individuals of similar interests or commonalities, conversing and connecting with one another, use mobile devices, usually with cell phones, and in virtual communities.
- Mobile supply chain management (MSCM)** Technology that monitors supply networks by observing specific events, disruptions, and exceptions in real-time alerts if problems occur and offers solutions.
- Model** Simplified representation or abstraction of reality. Models are often formulas.
- MRO** Products used for maintenance, repair, and operations.
- MtCO₂e** (Metric tonne (ton) carbon dioxide equivalent)
- Multichanneling** Integrating online and offline channels for maximum reach and effectiveness.
- Multidimensional database** Specialized data store that organizes facts by dimensions, such as geographical region, product line, salesperson, or time.
- Multimedia messaging service (MMS)** The next generation of wireless messaging, which will be able to deliver rich media.
- M-wallet (mobile wallet)** Technology that enables cardholders to make purchases with a single click from their mobile devices; also known as *wireless wallet*.
- MySpace** Social network that started as a site for fans of independent rock music in Los Angeles.
- Net earnings** Net income, net profit, or the "bottom line," which is calculated as revenues minus expenses.
- Net neutrality** The absence of restrictions or priorities placed on the type of content carried over the Internet by carriers.
- Network port** Physical interface for communication between a computer and other devices on a network.
- Networked computing** A corporate information infrastructure that provides the necessary networks for distributed computing. Users can easily contact each other or databases and communicate with external entities.
- Newgroups** An area on a computer network devoted to the discussion of a specific topic.
- Objective** Building blocks of strategy. They set out what the business is trying to achieve. They are action-oriented statements that define the continuous improvement activities that must be done to be successful.
- Occupational fraud** Abuse of a person's influence in the workplace or deliberate misuse of the organization's resources or assets for personal gain.
- Offshoring** See *offshore outsourcing*.
- Offshore outsourcing** Contracting with a vendor, who is located outside of the organization's own country, to develop and manage IT services.
- On-demand CRM** CRM *hosted* by an ASP or other vendor on the vendor's premise; in contrast to the traditional practice of buying the software and using it *on-premise*.
- One-back** For any location on the supply chain, this is the immediate previous source.

- One-up** For any location on the supply chain, this is the immediate subsequent recipient.
- Online analytical processing (OLAP)** Systems that contain *read-only data* that can be queried and analyzed much more efficiently than OLTP application databases.
- Online communities** Social networks of individuals who interact through specific media.
- Online processing** Processing system that operates on a transaction as soon as it occurs, possibly even in real time.
- Online transaction processing (OLTP)** A transaction processing system where transactions are executed as soon as they occur.
- Onshore sourcing** Using vendors who are in the same country.
- Open graph** An initiative proposed by Facebook that will link other Web sites to Facebook.
- Open-source software** A software for which the source code (how the software was actually written) is available for anyone free of charge.
- Operational awareness** The ability to see at any given time what is happening in the department or functional area of a business.
- Operational BI** A relatively new operation. Used to manage day-to-day operations.
- Operational data store** Database for transaction processing systems that uses data warehouse concepts to provide clean data.
- Operational decisions** Ensure that day-to-day operations are running correctly and efficiently.
- Operational-level information systems (or operational ISs)** System that captures and records all a company's data from operations and performs routine transactions needed to conduct business on an ongoing day-to-day basis.
- Operational responsiveness** The ability to respond to unexpected changes in conditions and customer demands as they occur.
- Operational risk** The risk of a loss due to inadequate or failed internal processes, people, and systems or from external events.
- Operational systems** Systems designed to store data required by an organization (e.g., sales orders, customer deposits) and are optimized to capture and handle large volumes of transactions.
- Optimization** Finding the best possible solution.
- Order fulfillment** All of the activities needed to provide customers with ordered goods and services, including related customer services.
- Organizational transformation** A major change in the way that an organization does business, often enabled by the application of information technology.
- Outbound logistics** Products are prepared for delivery (packing, storing, and shipping).
- Outsource relationship management (ORM)** Provides automated tools to monitor and manage outsource relationships.
- Outsourcing** Contracting with a vendor, who is outside of the organization, to develop and manage IT services.
- OWL (Web Ontology Language)** A type of language that was developed by the W3C to categorize and accurately identify the nature of things found on the Internet.
- Packet** A small unit of data.
- Packet switching** The path of the signal is digital and is neither dedicated nor exclusive.
- Palm OS** Palm, Inc. mobile OS.
- Parallel approach** An implementation approach where both new and old systems operate simultaneously for a designated period of time.
- Partner relationship management (PRM)** Business strategy that focuses on providing comprehensive quality service to business partners.
- Payment Card Industry Data Security Standard (PCI DSS)** Data security standard created by Visa, MasterCard, American Express, and Discover that is required for all members, merchants, or service providers who store, process, or transmit cardholder data.
- Payment Card Industry Security Standards Council (PCI SSC)** Organization founded by American Express, Discover Financial Services, JCB International, MasterCard Worldwide, and Visa, Inc.
- Performance management** These help to monitor business metrics and key performance indicators (KPIs).
- Periodic report** Report created or run according to a preset schedule (daily, weekly, or quarterly).
- Personal data assistant (PDA)** A small, handheld wireless computer.
- Personal information management (PIM)** A system that supports the activities performed by individuals in their work or life through the acquisition, organization, maintenance, retrieval, and sharing of information.
- Personalization** The user's personal characteristics that impact how relevant the 3Cs—content, commerce, and community—are to the individual.
- Pervasive computing** Invisible, everywhere computing that is embedded in the objects around us.
- Phased approach** An implementation approach that is based on the module or version concept, where each module or version of the system is implemented as it is developed and tested.
- Phishing** Deceptive attempt to steal a person's confidential information by pretending to be a legitimate organization.
- Physical controls** Protection of physical computer facilities and resources.
- Physical system design** States how the system will perform its functions, with actual physical specifications.
- Pilot approach** An implementation approach that is "pilot tested" at one site first, using either the plunge or the parallel approach, and later rolled out to other sites using the plunge approach.
- Planners Lab** Software for building a DVD. It is free to academic institutions.
- Plunge approach** An implementation system where the old system is turned off at the end of business on Day 0 and the new system is put into operation at the beginning of Day 1.
- Pod or podcast** Video file transferred over a network.
- Podcaster** Creator of pods.
- Podcasting** Distributing or receiving audio and video files called pods or podcasts over the Internet.
- Portal** Web-based gateway to files, information, and knowledge on a network.
- Predictive analysis** A tool that helps determine the probable future outcome for an event or the likelihood of a situation occurring. It also identifies relationships and patterns.
- Predictive analytics** The branch of data mining that focuses on forecasting trends (e.g., regression analysis) and estimating probabilities of future events. Business analytics, as it is also called, provides the models, which are formulas or algorithms, and procedures to BI.
- Price-to-performance ratio** The relative cost, usually on a per-mips (millions of instructions per second) basis, of the processing power of a computer.
- Primary activities** In Porter's value chain model, those activities in which materials are purchased and processed to products, which are then delivered to customers. Secondary activities, such as accounting, support the primary ones.
- Primary key** Field or attribute that uniquely identifies a record in a database.
- Priority matrix** A simple diagramming technique that assesses a technology's potential impact—from transformational to low—against the number of years it will take before it reaches mainstream adoption.
- Private cloud** Cloud owned by a large company or government agency with multiple locations when data confidentiality is required.

- Process improvement teams** Eliminates the non-value-adding steps and resolves quality problems in order to reduce the time needed to complete a process by adding new processes and/or deleting, splitting, combining, expanding, or reducing existing processes.
- Productivity paradox** The seeming discrepancy between extremely large IT investments in the economy and relatively low measures of productivity output.
- Produce-to-stock** The manufacture of products to stockpile inventory so the company is ready to respond to future demand.
- Programming attacks** Attack that involves programming techniques to modify other computer programs, such as a virus or worm.
- Project portfolio** IT resources, such as infrastructure, application services, data services, security services, to be developed.
- Proper resource allocation** The optimal distribution of resources to a specific place at a specific time to achieve a specific purpose.
- Protocol** The standard or set of rules that govern how devices on a network exchange and how they need to function in order to “talk” to each other.
- Public exchange (exchange)** E-marketplace in which there are many sellers and many buyers, and entry is open to all; frequently owned and operated by a third party.
- “Pure Play” BPM tools** Software tools that combine text and graphics and offer more advanced features such as a repository that allows reuse of resources and simulations. Using these, the process can be captured in greater detail, with a higher degree of accuracy.
- Radio frequency identification (RFID)** Generic term for technologies that use radio waves to automatically identify individual items.
- Random file organization** Records can be accessed directly regardless of their location on the storage medium. Also called direct file organization.
- Reach and richness** An economic impact of EC: the trade-off between the number of customers a company can reach (called *reach*) and the amount of interactions and information services it can provide to them (*richness*).
- Real-time system** An information system that provides real-time access to information or data.
- Real-time visibility** The ability to consistently have the right customer sizes in stock.
- Record** Related characters combined into a field or related fields, such as vendor name, address, and account data.
- Reintermediation** Occurs where intermediaries such as brokers provide value-added services and expertise that cannot be eliminated when EC is used.
- Relative advantage** The degree to which the new system is perceived as being better than the system it replaces, often expressed in the economic or social status terms that will result from its adoption.
- Reliability** The degree to which the new system is perceived as being better than the system it replaces, often expressed in the economic or social status terms that will result from its adoption.
- Remote Administration Trojan (RAT)** Malicious code that is a type of backdoor used to enable remote control over a compromised (infected) machine.
- Requests for quotes (RFQ)** Listing an item or service on an auction site.
- Resource allocation** Consists of developing the plans for hardware, software, data communications and networks, facilities, personnel, and financial resources needed to execute the master development plan, as defined in the requirements analysis.
- Response hierarchies** Model that business use to set measurable objectives. Stages include: awareness, knowledge, liking, preference, and purchase.
- Retinal scan** A biometric control that matches a user to the pattern of blood vessels in their retina.
- Reverse auction** Auction in which the buyer places an item for bid (*tender*) on a request for quote (RFQ) system, potential suppliers bid on the job, with the price reducing sequentially, and the lowest bid wins; primarily a B2B or G2B mechanism.
- Reverse logistics** A flow of material or finished goods back to the source; for example, the return of defective products by customers.
- Reverse supply chain** Products that are returned.
- Robot** Programmable machines.
- Rootkit** Set of network administration tools to take control of the network.
- RSS (Really Simply Syndication)** A standard of Web feed formats, usually Really Simple Syndication, that automate the delivery of Internet content.
- RSS reader** A place where RSS feeds allow users to aggregate regularly changing data, such as blog entries, news stories, audio, and video.
- Safety stock** Extra inventory kept in case of unexpected events. Also called *buffer stock*.
- Sales automation software** Productivity software used to automate the work of salespeople.
- SAP R/3** The leading EPR software (from SAP AG Corp.); a highly integrated package containing more than 70 business activities modules.
- SAR (specific absorption rate)** A way of measuring the quantity of radio frequency energy absorbed by the body.
- SCM 2.0** The use of social media tools to increase effectiveness of this communication, and enhancement of the acquisition of information necessary to make optimal decisions.
- SCM software** Applications programs specifically designed to improve decision making in segments of the supply chain.
- Scalability** Being able to add additional capacity incrementally, quickly and as needed.
- Scenario planning** A methodology in which planners first create several scenarios; then a team compiles as many future events as possible that may influence the outcome of each scenario.
- Search engines** Web sites designed to help people find information stored on other sites.
- Search engine optimization (SEO)** The process of improving the volume or quality of traffic to a Web site from search engines via unpaid search results.
- Secondary key** Nonunique field that has some identifying information (e.g., country of manufacture).
- Sell-side marketplace** B2B model in which organizations sell to other organizations from their own private e-marketplace and/or from a third-party site.
- Semantic Web** An evolving extension of the Web in which Web content can be expressed not only in natural language but also in a form that can be understood, interpreted, and used by intelligent computer software agents, permitting them to find, share, and integrate information more easily.
- Semistructured decisions** Decisions in which only some of the phases are structured; require a combination of standard solution procedures and individual judgment.
- Sensitivity analysis** Study of the impact that changes in one or more parts of a model have on other parts or the outcome.
- Sequential file organization** Way in which data records are organized on tape requiring that they be retrieved in the same physical sequence in which they are stored.
- Service-level agreement (SLA)** A written legal contract between a service provider and client wherein the service provider guarantees a minimum level of service.

- Service-oriented architecture (SOA)** An architectural concept that defines the use of services to support a variety of business needs. In SOA, existing IT assets (called services) are *reused* and *reconnected* rather than the more time consuming and costly reinvention of new systems.
- Service packs** Microsoft's releases to update and patch vulnerabilities in its operating systems or other software.
- Session Initiation Protocol (SIP)** Standardizes the signaling of calls or communications between different types of devices/end points from different vendors such as IP phones, instant messaging clients, soft-phones, and smartphones.
- SharePoint** An integrated suite of capabilities that provides content management and enterprise search to support collaboration.
- Sharing site** A Web site that allows users to share photos, videos, or other ideas/media.
- Short codes** A code of only five or six characters.
- Shortage** The absence of inventory.
- Short messaging service (SMS)** Technology that allows for sending of short text messages on some cell phones.
- Signature** A biometric control that matches a user to their signature.
- Single sign-on** Needing only one password, entered one time, to enter a Web site.
- Six sigma** A methodology to manage process variations that cause defects, defined as unacceptable deviation from the mean or target, and to systematically work toward managing variation to prevent those defects.
- Smart phone** Internet-enabled cell phones that can support mobile applications.
- SMART 2020 Report** The world's first comprehensive global study of the IT sector's growing significance for the world's climate.
- Social bookmarking** A method for Internet users to share, organize, search, and manage bookmarks of Web pages.
- Social computing** An approach aimed at making the human-computer interface more natural.
- Social engineering** Collection of tactics used to manipulate people into performing actions or divulging confidential information.
- Social graph** The global social network that reflects how we are all connected to one another through relationships.
- Social marketplace** The term social marketplace is derived from the combination of social networking and marketplaces, such that a social marketplace acts like an online community, harnessing the power of one's social networks for the introduction, buying, and selling of products, services, and resources, including people's own creations. A social marketplace can also be referred to as a structure that resembles a social network but has a focus on its individual members.
- Social media** The online platforms and tools that people use to share opinions and experiences, including photos, videos, music, insights, and perceptions, with each other.
- Social media metrics** The data-driving measurements that evaluate the effectiveness of social media efforts.
- Social media monitoring** Gives marketers the ability to discover public conversations about their brands and allows them to respond directly to their posts.
- Social media monitoring services** Services that use IT to track online content and then feed summary statistics into dashboards that can be used by their clients.
- Social media ROI.** This approach attempts to monetize the return on the cost of implementing social media strategies.
- Social network** Web sites that connect people with specified interests by providing free services such as photo and video sharing, instant messaging, blogging, and wikis.
- Social network analysis (SNA)** The mapping and measuring of relationships and flows between people, groups, organizations, animals, computers, or other information or knowledge processing entities. The nodes in the network are the people and groups, whereas the links show relationships or flows between the nodes. SNA provides both a visual and a mathematical analysis of relationships.
- Social network service (SNS)** A primarily Web-based service that uses software to build online social networks for communities of people who share interests and activities or who are interested in exploring the interests and activities of others. These services provide a collection of various ways for users to interact, such as chat, messaging, email, video, voice chat, file sharing, blogging, discussion groups, and so on.
- Social network services (SNSs)** Web sites that allow people to build their home pages for free and provide basic communication and other support tools to conduct different activities in the social network.
- Softphone** Computer that functions as a telephone via VoIP.
- Software-as-a Service (SaaS)** Also referred to as *on-demand computing*, *utility computing*, or *hosted services*. Instead of buying and installing expensive packaged enterprise applications, users access applications over a network, with an Internet browser being the only absolute necessity.
- Sourcing** Organizational arrangement instituted for obtaining IT products and services, and the management of resources and activities required for producing these services. These arrangements include insourcing, outsourcing, and offshore outsourcing.
- Sourcing strategy** Strategy to reduce cost of goods, increase speed to market, and improve quality of products.
- Spam** Use of e-mail to send unsolicited bulk messages.
- SPRQL** Language developed by the W3C that is a Protocol and RDF Query Language. It is used to write language programs that can retrieve and manipulate data stored in RDF format.
- Spend management** The way in which companies control and optimize the money they spend. It involves cutting operating and other costs associated with doing business. These costs typically show up as operating costs, but can also be found in other areas and in other members of the supply chain.
- Spot sourcing** Purchasing indirect materials on an as-needed basis.
- Spyware** Software that obtains information from a user's computer without the user's knowledge or consent.
- Standard Operating Procedure (SOP)** A clearly defined and mandatory procedure to be followed without deviation to complete a process or function.
- Storage as a Service** Storage capacity offered on a per usage basis, similar to SaaS.
- Strategic decisions** Decisions for sustained enterprise success and business growth.
- Strategic planning** A series of processes in which an organization selects and arranges its businesses or services to keep the organization viable even when unexpected events disrupt one or more of its business's markets, products, or services.
- Strategy** A broad-based formula for how a business is going to accomplish its mission, what its goals should be, and what plans and policies will be needed to carry out those goals.
- Structured decisions** Decisions that are routine and repetitive problems for which standard solutions exist.
- Supplier relationship management (SRM)** A comprehensive approach to managing an enterprise's interactions with the organizations that supply the goods and services it uses.
- Supply chain** A pipeline composed of multiple companies that perform any of the following functions: procurement of materials, transformation of materials into intermediate or finished products,

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- distribution of finished products to retailers or customers, recycling or disposal in a landfill.
- Supply chain management (SCM)** The management of all of the activities along the supply chain, from suppliers, to internal logistics within a company, to distribution, to customers. This includes ordering, monitoring, and billing.
- Supply chain team** A group of tightly coordinated employees who work together to serve the customer; each task is done by the member of the team who is best capable of doing the task.
- Support activities** Business activities that do not add value directly to a firm's product or service under consideration but support the primary activities that do add value.
- Sustainability** Refers to the concept of using things at a rate that does not deplete their availability in future generations.
- Sustainable biofuels** Energy source that will not be depleted in future generations.
- SWOT analysis** Involves the evaluation of strengths and weaknesses, which are internal factors, and opportunities and threats, which are external factors.
- Symbian OS** Symbian Foundation mobile OS.
- Systematic sourcing** Direct materials are traded in large quantities in an environment of a long-term relationship.
- Systems development life cycle (SDLC)** Large IT projects, especially those that involve infrastructure, are developed according to this methodology.
- Tacit knowledge** The domain of subjective, cognitive, and experimental knowledge that is highly personal and difficult to formalize.
- Tactical decisions** Decisions ensuring that existing operations and processes are in alignment with business objectives and strategies.
- Tactical metrics** A way an organization can define and measure their objectives.
- Tags** Identifier to describe various aspects of a Web page.
- Tag clouds** Graphic representations of all the tags people have attached to a particular page.
- Target** Desired levels of performance.
- TCP/IP (Transmission Control Protocol/Internet Protocol)** Internet protocols created by U.S. Department of Defense to ensure and preserve data integrity and maintain communications in the event of catastrophic war.
- Task-technology dependency** The ability of a technology to efficiently and effectively execute a task.
- Technical resource strategy** Defines how IT is used internally within the company to improve operational efficiencies, with associated bottom line cost savings.
- Technology acceptance model (TAM)** A robust, powerful, and simple model that measures an individual's intention to use technology by measuring two basic concepts: "perceived ease of use" and "perceived usefulness." The TAM is a good indicator of the success or failure of system implementation. It was originally developed by Fred Davis in 1989.
- Technology adoption lifecycle** A technique developed in 1957 at Iowa State College to track the purchase patterns of hybrid seed corn by farmers, and currently used to explain how innovations are adopted for use in organizations.
- Telematics** The integration of computers and wireless communications to improve information flow using the principles of telemetry.
- Text** Unstructured data and an asset that can be managed.
- Text analytics** Transforms unstructured text into structured "text data" that can then be searched, mined, or discovered.
- Text mining** The application of data mining techniques to discover actionable and meaningful patterns, profiles, and trends from documents or other text data.
- Thumbprint or fingerprint** A biometric control that matches a thumb or fingerprint to the user.
- Time-to-exploitation** Elapsed time between when a vulnerability is discovered and the time it is exploited.
- Tool-based metrics** Measurements designed to identify information about specific applications.
- Total benefits of ownership (TBO)** An approach for calculating the payoff of an IT investment by calculating both the tangible and the intangible benefits and subtracting the costs of ownership: $TBO - TCO = \text{Payoff}$.
- Total cost of ownership (TCO)** A formula for calculating the cost of owning and operating an IT system; includes acquisition cost, operations cost, and control cost.
- Total quality management (TQM)** A management strategy aimed at embedding awareness of quality in all organizational processes.
- Trackback** A type of hyperlink that is inserted into one's blog.
- Traditional BI** Strategic and tactical BI.
- Transaction costs** Costs that are associated with the distribution (sale) and/or exchange of products and services, including the cost of searching for buyers and sellers, gathering information, negotiating, decision making, monitoring the exchange of goods, and legal fees.
- Transaction processing system (TPS)** An information system that processes an organization's basic business transactions such as purchasing, billing, and payroll.
- Transport Control Protocol (TCP)** Network standard that provides a reliable, error-checking, connection-oriented delivery method.
- Trojan horse** Malicious code that creates backdoors, giving an attacker illegal access to a network or account through a network port.
- Tweets** Text posts to the Twitter Web site using the Web, phone, or IM. Tweets are delivered immediately to those signed up to receive them via the same methods.
- Two-factor authentication** System to verify a user's identity based on two pieces of information, such as a password and smart card.
- Unified messaging (UM)** Bringing together all messaging media such as e-mail, voice, mobile text, SMS, and fax into a combined communications medium.
- Unstructured decisions** Decisions that involve a lot of uncertainty for which there are no definitive or clear-cut solutions.
- Upload speed** How quickly data can be sent to a network or how fast a connection can transfer data from source computer or mobile device.
- URI (uniform resource identifier)** One of the features that allow data to be used by multiple applications.
- Usenet** Network that provided initial platform for online communities to make it possible for users to exchange messages on various topics.
- User acceptance** The extent to which a new system is perceived as being useful and easy to use by the system users. Acceptance of a system will be higher if users are involved in systems design.
- User Datagram Protocol (UDP)** Network standard that does not check for errors, and as a result, has less overhead and is faster than a connection-oriented protocol such as TCP. With UDP, the quality of the transmission is sacrificed for speed.
- Utility computing** Unlimited computing power and storage capacity that, like electricity, water, and telephone services, can be obtained on demand, used and reallocated for any application, and billed on a pay-per-use basis.
- Value chain model** Model developed by Michael Porter that shows the primary activities that sequentially add value to the profit margin; also shows the support activities.
- Value proposition** The analysis of the benefits of using the specific model (tangible and intangible), including the customers' value proposition.

- Vendor-managed inventory (VMI)** Strategy used by retailers of allowing suppliers to monitor the inventory levels and replenish inventory when needed, eliminating the need for purchasing orders.
- Vertical search** A search strategy that focuses on finding information in a particular content area, such as travel, finance, legal, and medical.
- Vertically integrated companies** Companies that control every part of their business from research and development to manufacturing and logistics.
- Viral blogging** Viral marketing done by bloggers.
- Viral marketing** Word-of-mouth marketing by which customers promote a product or service by telling others about it.
- Virtual community** A group of people with similar interests who interact with one another using the Internet.
- Virtual credit card** A payment mechanism that allows a buyer to shop with an ID number and a password instead of with a credit card number, yet the charges are made to the credit card.
- Virtual factory** Collaborative enterprise application that provides a computerized model of a factory.
- Virtualization** A concept that separates business applications and data from hardware resources, allowing companies to pool hardware resources, rather than dedicate servers to application and assign those resources to applications as needed.
- Virtual organizations** Organizations in which the product, the process, and the delivery agent are all digital; also called *pure-play organizations*.
- Virtual private network (VPN)** Connects remote sites or users together privately using “virtual” connections routed through the Internet from the company’s private network to the remote site or employee.
- Virtual teams** Groups of people who work interdependently with a shared purpose across space, time, and organization boundaries using technology to communicate and collaborate.
- Virtual world** A computer-based simulated environment intended for its users to inhabit virtual spaces and interact via avatars.
- Virtual world** A user-defined 3D world in which people can interact, play, and do business with the help of avatars.
- Virus** Malicious code that attaches itself and infects other computer programs, without the owner of the program being aware of the infection.
- Vision statement** An organization’s picture of where it wants to be in the future.
- VoIP (Voice over Internet Protocol)** Voice communication over a network using the Internet Protocol. Also called IP telephony.
- Voice commerce (v-commerce)** An umbrella term for the use of speech recognition to allow voice-activated services including Internet browsing and e-mail retrieval.
- Voice portal** A Web site that can be accessed by voice (e.g., via cell phone), and not via a computer.
- Voice scan** A biometric control that matches a user to their voice pattern.
- WAN (wide area network)** Network that covers a large geographic area, such as a state, province, or county.
- War driving** Stealth search for wireless local area networks by driving around a city or elsewhere.
- Warehouse management system (WMS)** A software system that helps in managing warehouses.
- Wearable devices** Mobile wireless computing devices for employees who work on buildings and other difficult-to-climb places.
- Web 2.0** The second generation of Internet-based services that let people collaborate and create information online in perceived new ways—such as social networking sites, wikis, and blogs.
- Web 3.0** A term used to describe the future of the World Wide Web. It consists of the creation of high-quality content and services produced by gifted individuals using Web 2.0 technology as an enabling platform.
- Web (or WWW)** Application that runs on the Internet, as does e-mail, IM, and VoIP. A system with universally accepted standards or protocols for storing, retrieving, formatting, and displaying information via client/server architecture.
- Web analytics** The analysis of clickstream data to understand visitor behavior on a Web site.
- Web-based system** An application delivered on the Internet or intranet using Web tools, such as a search engine.
- Web mining** The application of data mining techniques to discover actionable and meaningful patterns, profiles, and trends from Web resources.
- Web Services** Modular business and consumer applications, delivered over the Internet, that users can select and combine through almost any device, enabling disparate systems to share data and services. These are software systems designed to support machine-to-machine interactions over a network.
- Widget** A small application that can be installed and executed within a Web page by an end user.
- Wi-Fi** Technology that allows computers to share a network or Internet connection wirelessly without the need to connect to a commercial network.
- Wiki** Software program, discovery tool, collaboration site, and social network.
- WiMax** A wireless standard (IEEE 802.16) for making broadband network connections over a large area.
- Windows Mobile OS** Microsoft mobile OS.
- Wired equivalent privacy (WEP)** Weak cryptographic technique used for encryption.
- Wireless 911 (e-911)** Calls from cellular phones to providers of emergency services.
- Wireless access point (WAP)** Device that allows wireless communication devices to connect to a wireless network.
- Wireless application protocol (WAP)** A set of communications protocols designed to enable different kinds of wireless devices to talk to a server installed on a mobile network, so users can access the Internet.
- Wireless encryption protocol (WEP)** Built-in security system in wireless devices, which encrypts communications between the device and a wireless access point.
- Wireless fidelity (Wi-Fi)** The standard on which most of today’s WLANs run, developed by the IEEE (Institute of Electrical and Electronic Engineers). Also known as *802.11b*.
- Wireless mobile computing (mobile computing)** Computing that connects a mobile device to a network or another computing device, anytime, anywhere.
- Wireless sensor networks (WSNs)** Networks of interconnected, battery-powered, wireless sensors called *motes* (analogous to nodes) that are placed into specific physical environments. Each mote collects data and contains processing, storage, and radio frequency sensors and antennas. The motes provide information that enables a central computer to integrate reports of the same activity from different angles within the network. Therefore, the network can determine information such as the direction a person is moving, the weight of a vehicle, or the amount of rainfall over a field of crops with great accuracy.
- WLAN (Wireless Local Area Network)** Type of local area network that uses high-frequency radio waves rather than wires to communicate between computers or devices such as printers, which are referred to as nodes on the network.
- Wireless LAN (WLAN)** LAN without the cables; used to transmit and receive data over the airwaves, but only from short distances.

Word processors A text-based document processor that is one of the simplest ways to document a process.

Work Breakdown Structure (WBS) A project plan where the project scope is defined, and is used to estimate a realistic timeline and budget based on the availability of necessary resources.

Workflow management (WFM) A technique where documents, information, and activities flow between participants according to existing process models and rules; refers to activities performed by businesses to optimize and adapt their processes.

World Wide Web Consortium (W3C) Group working on programming standards to make it possible for data, information, and knowledge to be shared even more widely across the Internet.

Worm Malicious code that uses networks to propagate and infect anything attached to it—including computers, handheld devices, Web sites, and servers.

WWWANs (wireless wide area networks) WAN for mobile computing.

XBRL (eXtensible Business Reporting Language) Version of XML for capturing financial information throughout a business's information processes.

XML (eXtensible Markup Language) Meta-language for describing markup languages for documents containing structured information. XML-based systems facilitate data sharing across different systems and particularly systems connected via the Internet.

Zombies Computers that are infected.