Glossary

This glossary was developed from a variety of public- and private-sector sources. Because most if not all public-sector knowledge management activities were first developed and tested in business and industry applications, until recently there has not been a need for a sector-specific glossary. In addition, knowledge management practitioners in both the private and the public sectors employ extensive use of jargon and acronyms—most but not all of which are found in both sectors. Ergo, this glossary focuses on the limited number of core terms commonly found in the international KM literature, regardless of sector. The glossary is arranged in alphabetical order. In those instances where more than one term is used for the same activity or thing, these are also included as often as possible. This is still a rapidly evolving discipline; the terms and definitions used today may not be the same tomorrow. Therefore, some mistakes may appear and some important terms may be omitted. These reflect the best information available at the time of the book's preparation.

Adaptive Learning. Also known as *single-loop learning,* adaptive learning is the use of knowledge to solve specific problems based on existing assumptions and on what has worked in the past. It is the first step in *double-loop learning.*

After-Action Review. A process developed by the U.S. Army to help teams learn quickly from their successes and failures by sharing their learning with other teams. The review is a structured discussion that takes place as soon as possible after a project has been completed. The purpose is to determine what should have happened, what actually happened, and why it happened. This allows team members to emphasize their strengths and improve on any weaknesses when engaging in subsequent tasks or projects.

Compiled from a variety of sources, including the UK National Electronic Library for Health (2004), Daniel Stuhlman of Stuhlman Management Consultants (http://home.earthlink.net/~ddstuhlman/defin1.htm), and others, and are used with permission.

Artificial Intelligence: A broad term that describes computer programs designed to simulate human thought processes and behaviors to solve human-like problems.

Balanced Scorecard: A performance evaluation model developed by Robert S. Kaplan and David P. Norton (1996) as a tool to measure organizational performance against both short- and long-term goals. The balanced scorecard encourages administrators to focus their attention on the factors that most help the organization with its strategy. It measures other factors alongside the traditional financial or budgetary measures, including customer or client satisfaction, internal processes, employee learning, and the like. It is sometimes used in setting and measuring performance with knowledge management initiatives.

Benchmarking: Benchmarking is the practice of comparing the performance of an agency, department, or other government entity against the performance of a "best" agency, department, or organization similar to yours. The purpose is to determine how well your agency is doing compared to others in the same field. It also allows agencies to learn from the identified best practices.

Best Practices: A "best practice" is the performance, a process, or a method that has been identified as working well; it is, therefore, an exemplar that can be recommended for emulation. The term "good practice" is sometimes substituted by people who feel that it is impossible to identify a single "best" practice. Best practices may be found in behaviors, routines, scripts, and other approaches that are related to certain situations, problems, an organization, or organizations.

Best Practices Index (BPI): A performance management tool. The BPI is the degree to which an organization, agency, or unit has implemented seven key management practices: strategic planning, long-term financial planning, risk management planning, optimized asset management, performance measurement, customer involvement, and continuous improvement.

Budget and Performance Integration (BPI): One of the five key initiatives in President G.W. Bush's management agenda, BPI consists of efforts to ensure that performance is routinely considered in funding and management decisions and that those programs achieve expected results and work toward continual improvement.

Business Process Reengineering (BPR): This organizational transformation tool focuses on detecting the core processes that together constitute the

agency or business, and reconstituting them in a more efficient way, without functional barriers. BPR was designed to reduce complexity by reengineering operational and customer-directed activities into normal processes.

Capacity Building: A term in knowledge management that identifies a process of improving an organization's ability to implement a KM initiative, principle, or practice.

Champion: An important concept that refers to a high-level member of the organization who actively supports and promotes a management concept such as KM inside the organization, thereby persuading other managers, administrators, and staff of its benefits.

Chief Information Officer (CIO): A senior-level administrator or manager who typically manages the organization's entire IT or ICT program. The CIO has responsibility for information management and information technology; in some organizations, the chief knowledge officer reports to the CIO.

Chief Knowledge Officer (CKO): A senior-level administrator or an administrator who is responsible for ensuring effective knowledge collection and transfer of knowledge held by members of the organization, and manages information assets (technology) to achieve gains in performance and competitiveness.

Codification: The process of putting knowledge held in the organization into a form or forms that enable it to be communicated to others in the organization. A collection of "codes" is sometimes referred to as a "taxonomy" of knowledge. One way this is done is by writing things down, putting them into documents, and entering them into databases. Other methods include illustrations and sound and video recordings. *Knowledge harvesting* is a related term. A number of software programs, using keywords and/or descriptors, may be used as an aid in the codification process.

Collaboration: A process that leads to innovation of business processes, ultimately increasing organizational productivity and competitiveness through the sharing of information and knowledge among partners, clients, and suppliers.

Communication Processes: Information and communications technology with social processes that enable people to share information.

Community: The core group of members of an organization or group from which a community of practice or community of interest is formed. A community may include conveners, core members, and active, inactive, and peripheral members. Leadership in the community is exercised by a community coordinator.

Community of Interest (CoI): An informal network of people who share a common interest in a particular topic, either work related or peripheral to work, and who come together informally to share knowledge on that topic.

Community of Practice (CoP): A group of individuals that is informally bound to one another through a common class of practices and in pursuit of greater knowledge. Communities of practice make up the knowledge structures of an organization. In practice, CoPs are informal groups that complement formal structural groups such as departments and teams.

Community Workspace: A virtual team accomplishing a project goal through collaboration. The work of the group accelerates success, improves solutions, and captures work and knowledge for the organization.

Competitive Sourcing (CS): One of the five key initiatives in President G.W. Bush's management agenda, CS calls for regularly examining commercial activities performed by the government to determine whether it is more efficient to obtain such services from federal employees or from the private sector (often referred to as *outsourcing*).

Content Management: *Content* refers to computer-based information such as the content of a Web site or a database. Content management is about making sure that content is relevant, up-to-date, accurate, easily accessible, and well organized so that quality information is available to users when it is needed.

Core Competencies: Core competencies are what an agency does best. They are a combination of knowledge capabilities that represent the agency's key strength. Core competencies are considered to be sustainable over time.

Cultural Knowledge: The shared assumptions and beliefs that are used by people in organizations to (1) perceive and explain reality, and (2) assign value and significance to new information.

Customer Capital: The combined value of all the relationships an organization has with its customers or clients, past, present, and future. Customer

capital includes tangible and intangible factors, including customer opinions, customer loyalty, and preferences. Customer capital is a component of a larger value concept, intellectual capital.

Customer Relationship Management (CRM): CRM is a business strategy based on selecting and proactively managing the most valuable customer relationships. It requires a customer-focused philosophy to support effective marketing, sales, and customer service processes. A number of commercially available software programs have been developed to enable organizations to do a better job of managing their customer relations programs.

Data: Data are facts, concepts, or statistics that can be collected, stored, or analyzed to produce information.

Data Mining: A technique for analyzing data in very large databases and making new connections between the data in order to reveal trends and patterns. Data mining is also known as knowledge discovery in databases (KDD); it is the extraction of implicit, previously unknown, and potentially useful information from databases. The process uses machine learning, statistical correlations and statistical analysis, and sophisticated search strategies to extract data in such a way that the information is easily comprehensible.

Document: A record of an event or recorded knowledge so that the information will not be lost. Documents are usually written, but may also be made up of images and/or sound. Documents can be put into electronic or digital form and stored in a computer.

Document Management: Systems and processes for managing documents, including the creation, editing, production, storage, indexing, and disposal of documents. This usually refers to electronic documents and uses specific document management software.

Domain: The domain of a community of practice includes the key issues or problems that members of the larger group seek to resolve, or that they consider essential to the group's primary mission. Members typically have a passion for the domain topic and understand how it contributes to a greater social good.

Double-Loop Learning. Different from single-loop learning, double-loop learning involves questioning existing assumptions in order to create new

insights. Consider the problem, How can we prevent earthquakes from killing people? Single-loop learning would involve learning how earthquakes happen, then trying to predict them to be better prepared to survive them. The double-loop response would be to question the idea of "earthquake" and might conclude that earthquakes do not kill people; falling buildings do. Double-loop learning is also known as *generative learning*.

E-Business: The use of electronic information technologies (especially Internet technologies) in business practices. E-business may be business to customer (B2C) or business to business (B2B).

E-Commerce: The use of electronic information systems (especially Internet technologies) to perform business transactions (buy and sell).

E-Government: The delivery of governmental services using electronic information systems (especially Internet technologies).

E-Government Act of 2002: H.R. 2458/S. 803 was signed by President G.W. Bush on December 17, 2002, with an effective date of April 17, 2003. The act establishes an office of e-government within the OMB, and authorizes the naming of an e-administrator. It requires an annual report to Congress; calls for dialogue with state and local as well as tribal governments, the general public, and the private and nonprofit sectors to find innovative ways to improve the performance of governments in collaborating on the use of information technology to improve the delivery of government information and services; sets standards for federal agency Web sites; and creates a public directory of agency Web sites.

E-Learning: The use of electronic information systems to deliver learning and training.

E-Mail: Short for electronic mail. Uses Internet technologies to send messages and documents to and from computers around the world in a matter of seconds. Sending or receiving e-mail requires Internet access and an e-mail address.

Enterprise Architecture: A comprehensive model of all the key elements and relationships that make up an enterprise, agency, or organization. The federal enterprise architecture initiative forbids federal agencies to purchase technology without first completing an enterprise architecture study of their organization and its IT needs.

Expanded Electronic Government (EEG): One of the five key initiatives in President G.W. Bush's management agenda, EEG refers to programs to ensure that the federal government's $60-billion annual investment in information technology (IT) significantly improves the government's ability to serve citizens, and that IT systems are secure, delivered on time, and on budget.

Expertise: A tacit ability of individuals, ratified through a community of practice, to approach a problem with a large bag of tools, practices, and relationships that lead to new ways of doing things, which are then emulated in "best practices."

Expert System: A computer program developed to simulate human decisions in a specific field or fields; expert systems are considered to be a branch of artificial intelligence.

Expertise Directory (Experts Directory or Skills Directory): A staff directory in the form of a database that includes details of people's skills, knowledge, experience, and expertise. The directory allows users to search for people with specific know-how, using search engines and key words.

Explicit Knowledge: Knowledge that can be easily expressed in words or numbers, or both, and that can be shared through discussion or by writing it down and producing it as documents, manuals, or databases. Examples might include a telephone directory, an instruction manual, or a report of research findings.

Externalization: The process of making tacit (or implicit) knowledge explicit.

Extranet: A Web site that links an organization with other specific organizations or people. Extranets are accessible only to those specified organizations or people and are protected by passwords.

Federal Enterprise Architecture (FEA): A business reference model–based initiative designed to provide a common framework for improvement in such areas of federal government operations as budget allocations and budget and performance integration, horizontal and vertical information sharing, performance measurement, cross-agency collaboration, e-government, and component-based architectures, among others. Led by the Office of Management and Budget, FEA's fundamental purpose is to identify opportunities to simplify processes and unify work across agencies and within the lines of business of the federal government. A key goal of FEA is to help agencies become

a more citizen-centered, customer-focused government that maximizes investments to better achieve mission outcomes.

Federal Enterprise Architecture Management System (FEAMS):
FEAMS is a Web-based management information repository and analysis system designed to provide agencies with access to initiatives aligned to the federal enterprise architecture (FEA) and associated references models. FEAMS was issued by the OMB in December of 2003 to provide users with an intuitive approach to discover and potentially leverage information technology components, business services, and capabilities across the federal government.

Firewall: Software that protects an organization's computer systems from such problems as viruses that can be carried by Internet technologies or hackers seeking to gain unauthorized access to a database or system.

Government Secure Intranet (GSI): A limited-access intranet that links government departments.

Groupware: Computer software applications that are linked together by networks, and so allow people to work together and share electronic communications and documents.

HTML: Abbreviation for *HyperText Markup Language.* The major language of the Internet's World Wide Web. Web sites and Web pages are written in HTML, which basically consists of a set of instructions for creating Web pages.

Human Capital: The knowledge, skills, and competencies of the people in an organization. Human capital is one component of intellectual capital.

ICT: Abbreviation for Information and Communication Technology (plural: ICTs)

Implicit Knowledge: *See* Tacit Knowledge.

Improved Financial Performance (IFP): One of the five key initiatives in President G.W. Bush's management agenda, IFP is concerned with accurately accounting for taxpayers' money and giving managers timely and accurate program cost information to improve management decisions and control costs.

Information: The organized data that has been arranged for better comprehension or understanding. What is one person's information can become another person's data.

Information and Communication Technology (ICT): Technology that combines computing with high-speed communications links carrying data, sound, and video.

Information Technology (IT): IT includes the physical components of computing, including servers, networks, and desktop computing, which enable digital information to be created, stored, used, and shared. IT is one of the chief components in a KM system.

Innovation: The creation of something new or different; the conversion of knowledge and ideas into a new benefit, such as new or improved processes or services. A related term is *invention,* which implies something entirely new, while innovation can also mean new uses for old or existing tools, materials, and/or processes.

Intellectual Assets: *See* Knowledge Assets.

Intellectual Assets Management (IAM): The management of an organization's intellectual assets in order to improve the performance of the organization. In theory, IAM is synonymous with knowledge management, but, in practice, intellectual assets management tends to focus more on issues relating to intellectual property such as exploiting patents, copyrights, trademarks, and other intellectual property rights.

Intellectual Capital: The same as the knowledge assets of an organization. This capital is the set of intangible assets that includes the internal knowledge employees have of information processes, external and internal experts, products, clients and customers, and competitors. Intellectual capital includes internal proprietary reports, libraries, patents, copyrights, and licenses that record the company history and help it plan for tomorrow.

Intellectual Property Rights: The legal rights associated with intellectual property. Intellectual property is often copyrighted or trademarked.

Internalization: The process by which explicit (easily communicated or shared) knowledge is absorbed and made tacit (internal or personal).

Internet: The Internet is the system of computers that are linked together (networked) in order to allow the exchange of information and resources. Using computers connected via communications media (such as telephones), the Internet makes it easy for people all over the world to communicate with one another. The Internet is a shared global resource that is not owned or regulated by anyone (although authoritarian governments control some content and/or access by their citizens).

Intranet: A computer network that functions like the Internet, but in which the information and Web pages are located on computers within an organization or a restricted group of organizations. Intranets are not accessible to the general public.

Knowledge: One definition of knowledge is the facts, feelings, or experiences known by a person or group of persons. Knowledge is derived from information. However, it is much richer and more meaningful than information. It includes familiarity, awareness, and understanding gained through study, results or comparisons and combinations, identifying and weighing consequences, and making connections. Wisdom and insight are also included in some definitions of knowledge. In organizations, some synonyms for knowledge include know-how, applied information, information with judgment, and other phrases.

Knowledge Assets: Also known as *intellectual assets,* these are the parts of an organization's assets that relate to knowledge, including know-how, best practices, intellectual property, and others. Knowledge assets are sometimes divided into three separate parts: human (people, teams, networks, and communities), structural (the codified knowledge found in processes and procedures), and technological (the technologies that support knowledge sharing, such as databases and intranets).

Knowledge Audit: A method for reviewing and mapping information and its transfer in an organization. An audit examines such things as what information is needed, what information is currently available, where the information is located, in what form(s), how it flows in the organization, the location of gaps in the network, and where duplication exists. It also establishes the value of the information. In first-generation knowledge management systems the knowledge audit may be referred to as an information audit.

Knowledge Base: The body of knowledge available to an organization. It includes the knowledge held by people, supported by collections of informa-

tion and data, and can also include patents, trademarks, etc. In some organizations, subject-specific knowledge bases are developed to collate information on key topics or processes. *Knowledge base* is also the term used to describe a database of information.

Knowledge Broker: A knowledge broker is some person or group in an organization who facilitates the creation, sharing, and use of knowledge. The term is also sometimes used to refer to companies or individuals that operate commercially as knowledge traders, or to firms providing knowledge-related services.

Knowledge Flows: The paths that knowledge takes in moving around and in and out of an organization.

Knowledge Integration: Integrating the tacit knowledge of two or more individuals to create new agency-level knowledge.

Knowledge Management: One definition of knowledge management is the creation and subsequent management of an organizational culture that encourages knowledge to be created, shared, learned, enhanced, organized, and used for the benefit of the organization and its stakeholders.

Knowledge Management Strategic Plan: A detailed plan that outlines how an organization intends to implement knowledge management principles and practices in order to achieve organizational objectives.

Knowledge Manager: A member of an organization with the developmental and operational responsibility for promoting and implementing knowledge management principles and practices in an organization or one or more of its units.

Knowledge Mapping: A process for identifying and recording where knowledge assets are located in an organization. A knowledge map also indicates how knowledge flows between and among members of the organization. This makes it possible to evaluate relationships between knowledge holders, a process that results in identifying the sources, flows, limitations, barriers, and losses of knowledge in the organization.

Knowledge Repository: A place where explicit knowledge is collected and stored. The term is also used to refer to the collection of information and knowledge organized according to categories of interest to the agency. A

low-tech repository might be simply a set of file folders; a high-tech repository might be retained on a database platform that is accessible through such technologies as intranets and browsers.

Knowledge Segment: Everything an agency's staff and electronic systems know about a specific domain. For example, the FBI's knowledge total of firearms constitutes one of that agency's knowledge segments.

Knowledge Worker: An employee of an organization whose performance relies on his or her ability to find, process, combine, and even reject knowledge from within and without the organization.

Learning Organization: A learning organization is one that considers its future success to be based on maintaining continuous learning and adaptive behavior. Through learning from and reacting to its environments, the organization is able to develop skills in creating, acquiring, interpreting, and retaining knowledge. The organization then makes future modifications to its behavior in ways that reflect its new knowledge and insights.

Leverage: A process by which managers gain benefits from the use of a physical or knowledge-based resource that exceed the inherent value of the resource.

Lessons Learned Database: A database in which examples of previous experiences are stored, along with the reasons why they succeeded or failed, and the lessons that staff members learned from them.

Mentoring: Mentoring is a one-to-one learning relationship in which a senior member of an organization supports the development of a newer or more junior member by sharing his or her knowledge, experience, and wisdom with the junior member. A related term is *coaching*. The strength of mentoring lies in transferring the mentor's specific knowledge, experiences, and wisdom. In coaching, the strength lies in the ability of the coach to help the student develop his or her own personal qualities and abilities.

New Technology: Technology that is new to the organization, but not necessarily newly created or installed.

Organizational Best Practices Index: *See* Best Practices Index.

Organizational Culture: Often paraphrases the feeling of an organization's members expressed in the phrase "the way we do things around here." More

formally, an organization's culture is a mixture of its traditions, values, beliefs, attitudes, and behaviors. Different organizations performing similar tasks can have vastly different cultures. An organization's culture is important in knowledge management; it must value and promote such qualities as trust and openness. If it does not, then KM initiatives are not likely to succeed.

Organizational Learning: Popularized in Peter Senge's 1990 text *The Fifth Discipline, organizational learning* refers to the ability of an organization to gain knowledge from experience, through experimentation, observation, analysis, and a willingness to examine both successes and failures, and then to use that knowledge to do things differently. Organizational learning cannot occur without individual learning, although individual learning does not necessarily promote organizational learning. For organizational learning to take place, the organization as a body must become more knowledgeable and skillful in pursuing its goals and objectives.

Organizational Memory: This is the sum of the knowledge and understanding embedded in an organization's people, processes, services, or products, along with its traditions and values. Organizational memory can either promote or hinder the progress of the organization.

Peer Assist: A practice in which an individual or team calls a meeting or a workshop in order to tap the knowledge and experience of others before embarking on a project or activity.

Portal: A special Web page that organizes access to all of the online resources about a topic, an organization, an agency, or an individual, providing a one-stop shop of sorts. It is often referred to as a *Web portal.*

Practice: A core concept in communities of practice, practice denotes both methodologies and skills; it includes the job or task-related techniques, methods, stories, tools, and professional attitudes of the members of the community.

President's Management Agenda (PMA): The PMA was launched in 2002 as a strategy for improving the management and performance of the federal government. It focuses on the areas where deficiencies were most apparent and where the government could begin to deliver concrete, measurable results. PMA includes five federal government-wide initiatives and ten program-specific initiatives that apply to a subset of federal agencies. The five key government-wide areas are: strategic management of human capital,

competitive sources, improved financial performance, expanded electronic
government, and budget and performance integration (see individual entries
for definitions of each area). For each initiative, PMA established clear, gov-
ernment-wide goals (termed *standards for success*), and developed aggres-
sive action plans to achieve those goals. A government-wide scorecard
reporting individual agency progress is published quarterly.

Process Team: A group of skilled workers responsible for an agency's op-
erational and/or strategic processes.

Quick Win: An initiative or solution that yields rapid positive results. Build-
ing quick wins into a change initiative often promotes greater willingness to
stay with the project.

RDI Methodology: Results-driven incremental methodology; a way of imple-
menting a complex project or program such as a knowledge management
system so that each phase builds on a learning experience gained from the
preceding phases.

Records Management: Every organization creates records, whether they
are on paper, on film, electronic records, or some other format. Records man-
agement helps an organization ensure that it is creating and maintaining an
adequate documentary record of its functions, policies, decisions, procedures,
and essential transactions. It then helps the organization to decide which
records to keep and which to destroy, and how best to organize them all.
Hence, it involves processes relating to the generation, receipt, processing,
storage, retrieval, distribution, usage, and retirement of an organizations
records.

Return on Investment (ROI): An estimate of the financial benefit (the re-
turn) on the money spent (the investment) of a particular program, system, or
initiative. ROI is often used to aid in cost-benefit decision making.

Search Engine: A software program that carries out searches for informa-
tion. Search engines are what facilitate literature searches on the Internet and
in various informational databases.

Server: A computer that shares resources with other computers in a net-
work.

Single-Loop Learning (*see* Adaptive Learning): Single-loop learning involves

using knowledge to solve specific problems, using existing assumptions. It is often based on what has worked in the past. In contrast, double-loop learning goes a step farther and questions existing assumptions to create new insights and ideas.

Storytelling: The use of stories in organizations is a way of sharing knowledge and helping learning. Stories can be very powerful communication tools, and may be used to describe complicated issues, explain events and their antecedents, communicate lessons learned, and contribute to changes in organizational culture.

Strategic Knowledge Management: A way of focusing a KMS application that links the development of the agency's knowledge to a competency strategy.

Strategic Management of Human Capital (SMHC): One of five government-wide initiatives included in President G.W. Bush's management agenda, SMHC consists of processes to ensure the right person is in the right job, at the right time, and is not only performing, but performing well. It is closely associated with human resources planning (HRP).

Structural Capital: A term that refers to an organization's captured knowledge, such as best practices, processes, information systems, databases, etc. It is often used to describe the knowledge that remains in the organization after employees depart. Structural capital is one component of intellectual capital.

Tacit Knowledge: Knowledge that resides in the heads and hands of individuals. It is the implicit knowledge used by members of an organization to perform their work and to make sense of their worlds. It is very difficult to use documents or other media to transfer tacit knowledge to others without learning by doing. Tacit knowledge tends to be shared between workers through discussions, stories, and personal exchanges. It includes skills, experiences, insight, intuition, and judgment.

Taxonomy: A hierarchical organizing structure for categorizing a body of information or knowledge. A taxonomy facilitates an understanding of how that knowledge can be broken down into logical parts, and how these parts relate to each other. Taxonomies are used to organize information in systems.

Thesaurus: An organized language, used for inputting and searching information systems. It predefines the relationships between terms and concepts used in its vocabulary.

Virtual Team: *Virtual* is a term used to describe something that exists or is brought together via electronic networks, rather than existing in a single physical place. A virtual team is a group of individuals who are not located together, but who use electronic networks for communication, collaboration, or work processes.

Web Browser: A software program that resides on a computer and enables access to the Internet and viewing of World Wide Web pages and documents. Netscape and Internet Explorer are examples of Web browsers.

White Pages: In knowledge management, *white pages* refers to a structured directory of people within an organization. It is usually in electronic form, and is often the basis for an expertise directory.

World Wide Web: The terms *the Internet* and *the Web* are often used interchangeably. However, the World Wide Web is actually a collection of Web pages that can be accessed on the Internet. The Web has become the most popular area of the Internet because everyone can view the pages regardless of what kind of computer they are using.

XML: An abbreviation for *eXtensible Markup Language.* XML is a successor technology to the markup language HTML, which is used for creating Web pages and documents.