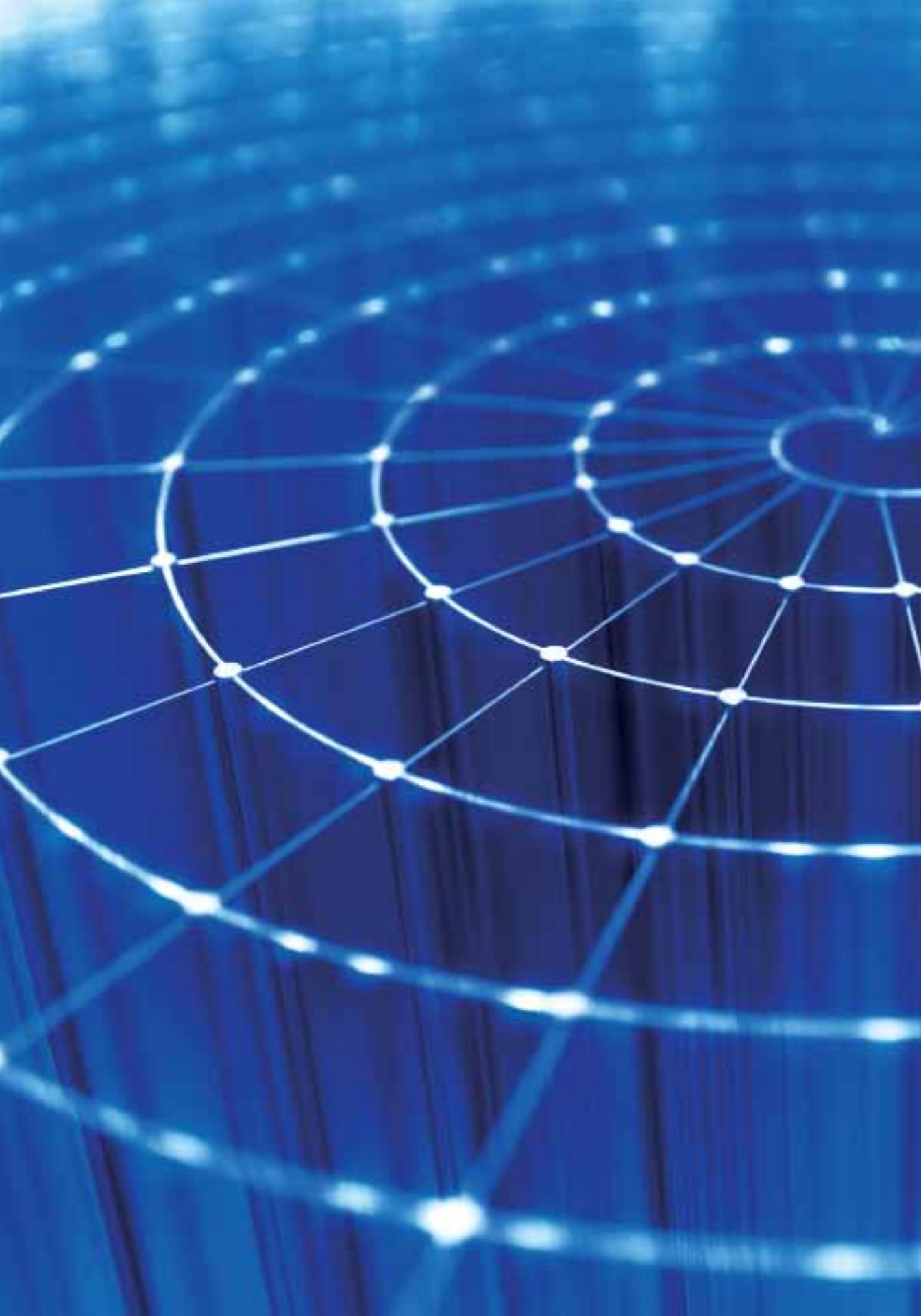




KnowledgeWeb™
LEARNING OPTIMIZED





“An organization’s ability to learn, and translate that learning into action rapidly, is the ultimate competitive advantage.”

Jack Welch

Why a KnowledgeWeb?

Developing a more knowledgeable workforce is imperative for all globally competitive enterprises. The fundamental ability to transfer, measure and certify learner knowledge is critical to success. To accomplish this, traditional training paradigms must transition to a new, optimized learning environment—a true *knowledge transfer* environment—a KnowledgeWeb.

Emc2



“Information is not knowledge.”

Albert Einstein

What is a KnowledgeWeb?

It is a common misconception that data is knowledge. But for data to truly become knowledge, it must first be converted into information and then successfully transferred to a learner. A KnowledgeWeb is a dynamic environment specifically engineered to maximize knowledge transfer efficiency and reduce time to competency for all learners, enterprise-wide.

A KnowledgeWeb is:

A unique environment that transforms data into information and information into knowledge

A system that measures learning

An effective and efficient service to transition to a new, optimized learning environment

A systematic method to identify and quantify all knowledge requirements for an entire body of knowledge

A validation of all terminal and learning objectives for all knowledge required in a specific job responsibility

Organization of all information required to fulfill learning initiatives related to any equipment, process, system or product, in any business environment

A compilation of engineered and validated Microcourses™ organized and mapped to a site- and job-specific knowledgebase

A Personal Learning Path dynamically created for each worker by a Differential Learning Engine

A certification that learner-specific knowledge has been acquired

FEDERAL RESERVE NOTE



THIS NOTE IS LEGAL TENDER FOR ALL DEBTS, PUBLIC AND PRIVATE.

Benjamin Franklin

Department of the Treasury

SERIES 2009 A



ONE HUNDRED DOLLARS



“An investment in knowledge
always pays the best interest.”

Benjamin Franklin

How is a KnowledgeWeb Engineered?

KnowledgeWeb Engineering is a discipline that simplifies and organizes the vast amount of data and information challenging workers today, and provides them with access to the specific learning modules they need—when they need it. A KnowledgeWeb can be engineered on a stand-alone basis, or seamlessly integrated with existing learning and content management systems. It can be engineered to accommodate virtually any budget or deployment timeline, in any site. The KnowledgeWeb is completely scalable—it can be engineered for a single job, a single product, a single system, a single site or throughout an entire enterprise. The result is a valuable intellectual property that provides an immediate and continuing return on investment.

The sequential steps required to engineer a KnowledgeWeb include:

Define Learning Initiative Scope

Conduct a Job Knowledge Analysis to define the categories, topics and subjects needed to address the learning initiative's scope.

Verify Knowledge Requirements

Verify the total knowledge requirements by analyzing all available procedures, manuals, PFDs, P&IDs and current course content. Develop terminal and learning objectives to support the defined knowledge requirements.

Develop Learning Content and Assessments

Develop Microcourses, Mastery Assessments and Knowledge Evaluations necessary to support all terminal and learning objectives.

Map and Organize Content

Map the Microcourses to site-specific jobs, and organize into the knowledgebase.

Validate

Validate the knowledge transfer effectiveness of all Microcourses, assessments and evaluations.

Implement

Assimilate the knowledgebase into the KnowledgeWeb, and activate the Differential Learning Engine. Implement Personalized Learning Paths. Begin certifying knowledge proficiency.

$$\begin{aligned}
 & \left\{ x^3 \log(x) \log^3(x+1) - \frac{1}{108} (x+1) (4(9x^3) \right. \\
 & \left. - 9 \log^2(x+1) + 6 \log(x+1) - 2) (x+1^2) \right. \\
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 & \left. - 3 \left\{ -\frac{1}{3} \log(x) \log^3(x+1) - x \log^2(x+1) + \right. \right. \\
 & \left. \log(x) \log^2(x+1) + 2 \left\{ -\frac{1}{2} \log^2(x+1) + \right. \right. \\
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 & \left. \left. \left\{ -\frac{x^3}{27} + \frac{5x^2}{36} + \frac{1}{18} (2x^2 - 3x + 6) \log(x) \right. \right. \right.
 \end{aligned}$$

$$= 2$$

“Sometimes the questions are complicated and the answers are simple.”

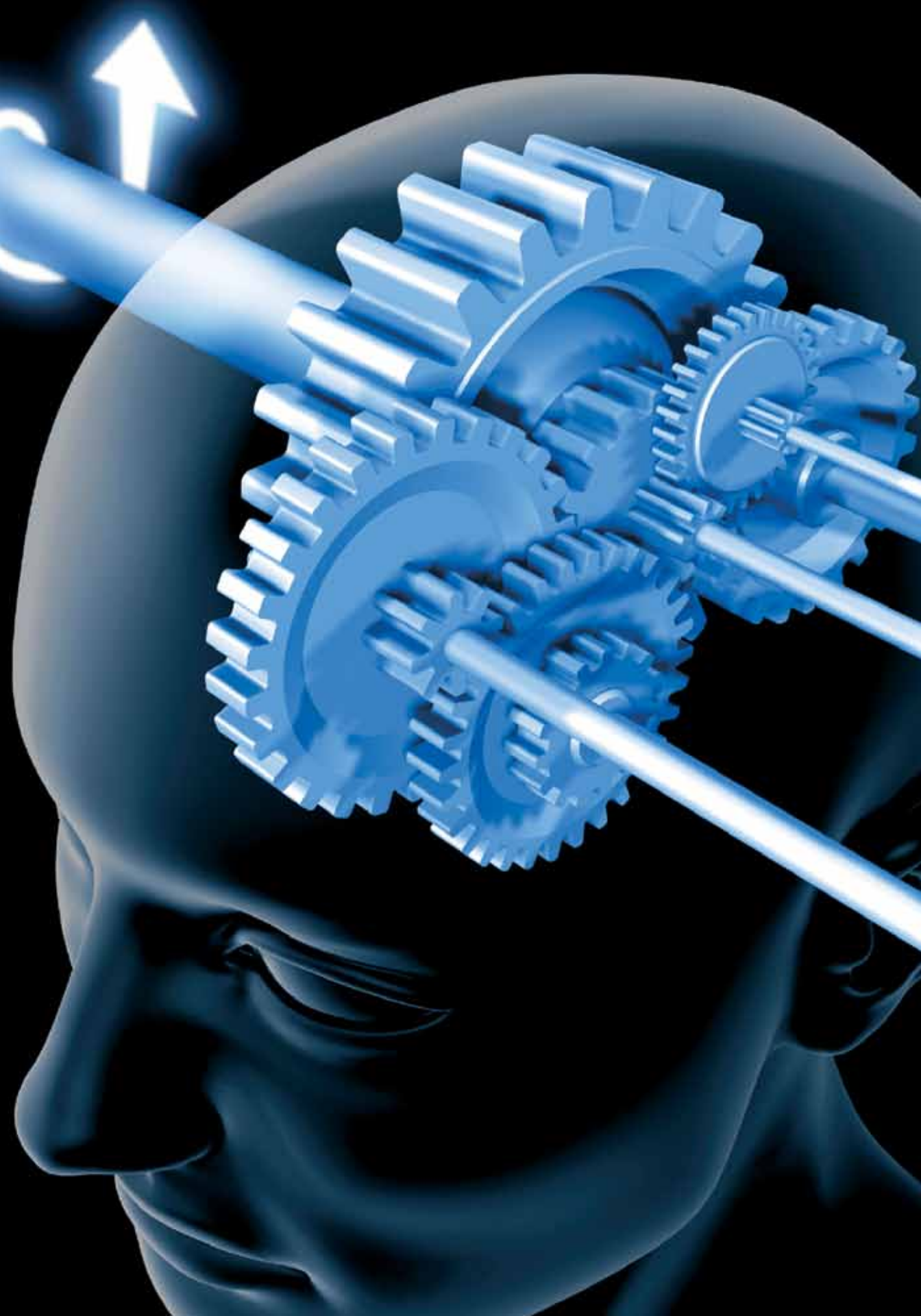
Dr. Seuss

What are the Benefits of a KnowledgeWeb?

The discipline of KnowledgeWeb Engineering creates a learning environment that extends far beyond the expectations of traditional training paradigms. The benefits of an optimized learning environment impact the entire organization.

Key benefits of a KnowledgeWeb include:

- A focus on the unique needs of adult learners with technical and complex knowledge requirements
- Instruction based on a proven Instructional System Design (ISD) methodology that meets or exceeds stringent criteria established by accredited organizations of learning professionals
- Continuously monitored and updated knowledge requirements to keep pace with changes in regulations and requirements
- Reduced time to proficiency and elimination of redundancy by focusing on individual knowledge needs and providing learners with access to information and online learning programs anytime/anywhere
- Measurement and assessment of each learner’s competency and prescribed learning paths for each
- Best practice capture and integration through site- and job-specific knowledge requirements
- Remediation until learner-specific knowledge proficiency can be certified to 100%
- Rigorous validation of all steps in the process
- A focus on site-, job- and learner-specific knowledge requirements
- No investments in hardware, software and IT-staff
- A transparent interface to existing learning and content management systems



“Knowledge is the only instrument of production that is not subject to diminishing returns.”

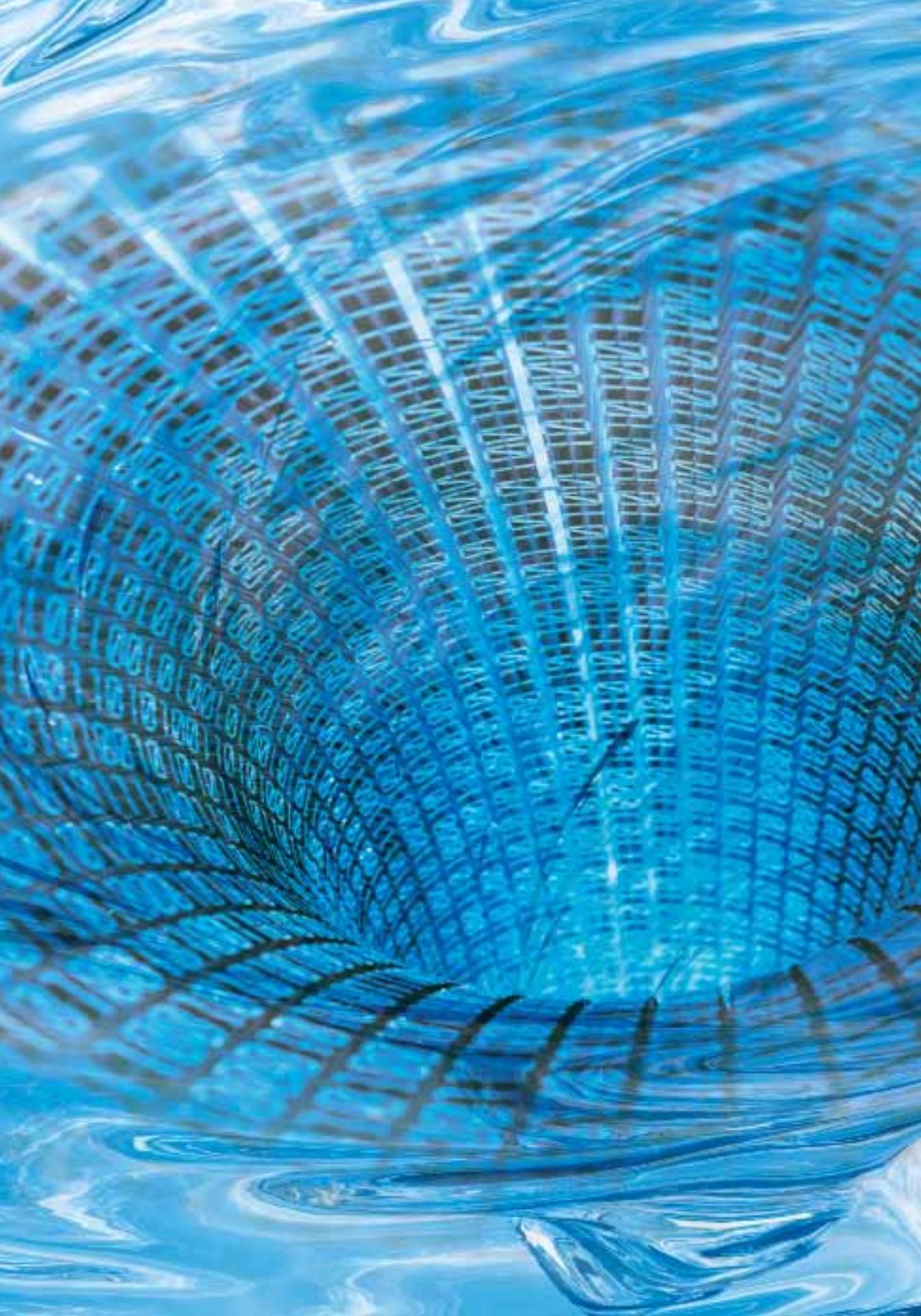
J.M. Clarke

Who Needs a KnowledgeWeb?

A KnowledgeWeb optimizes learning and provides continuing benefits and returns to organizations. With data and information increasing at an exponential rate, effective knowledge transfer is critical to success. High performance organizations require an optimized learning environment to enhance global competitiveness.

A KnowledgeWeb is the solution for organizations that:

- Face strict mandated and safety compliance requirements
- Must train their workforce on complex information and procedures
- Manage a diverse, knowledge-based workforce
- Must show a measurable ROI or profit on their delivered training
- Have less time and resources available for training
- Need real-time access to information—anytime, anywhere
- Must standardize and implement best practices across the enterprise
- Face constantly changing information requirements
- Must certify knowledge proficiency



“We are drowning in information,
but starved for knowledge.”

John Naspitt

Who Benefits from a KnowledgeWeb?

In a word—*everyone*. Whether you have a single site or a global enterprise, KnowledgeWebs will benefit everyone throughout the organization, including:

Learners who think and learn virtually and want to initiate the learning experience at anytime, from anywhere, using a Web browser and the Internet

Supervisors trying to cope with less time and resources available for training

Site Managers who require that all investments in training have a measurable ROI

Enterprise Managers who must implement consistent best practices

Safety Managers who need to change behaviors to ensure maximum safety and productivity

Hiring Managers who need to qualify and quantify the existing knowledge levels of prospective new hires and certify their readiness for assignment

Training Managers who have fewer resources to deal with constantly evolving and expanding compliance requirements

Compliance Managers who must ensure compliance with unit- and job-specific corporate and government mandates in a generic training world

HR Managers charged with increasing the value of the enterprise’s most valuable asset—its workforce knowledge—and preventing the loss of institutional knowledge as employees retire

Subject Matter Experts who need to capture information and keep it evergreen



“It is possible to fly without motors,
but not without knowledge and skills.”

Wilbur Wright

When is Learning Optimized?

Creating a more knowledgeable workforce isn't about providing more training; it's about effective learning. A KnowledgeWeb changes the focus from training to learning.

Learning is optimized when:

- Each learner's personal knowledge gaps are identified and remediated to 100% proficiency
- Redundant training is eliminated, improving the adult learning experience
- All knowledge requirements and critical operating data are defined, organized and addressed
- Learning is enabled on the job, accessible anytime/anywhere

Learning is optimized when time to competency is reduced and knowledge transfer effectiveness is improved. A KnowledgeWeb is learning optimized.

“Knowledge has to be improved, challenged and increased, or it vanishes.”

Peter Drucker

Resource Development Company, LLC

Resource Development Company (RDC) is a global leader in developing innovative learning solutions. For the past 50 years, we have specialized in providing learning solutions to the oil and gas, refining, chemical, petrochemical and pharmaceutical industries. Extensive industry knowledge and advanced web technology allow RDC to deliver unparalleled learning management, performance support and compliance information management solutions.

RDC is a privately held corporation with offices in Birmingham, MI; Cleveland, OH; and Houston, TX. For more information, call 1-800-360-7222 or visit www.rdc.us.com.

