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Chapter XX

Strategic Planning for E-Learning in the Workplace

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ABSTRACT

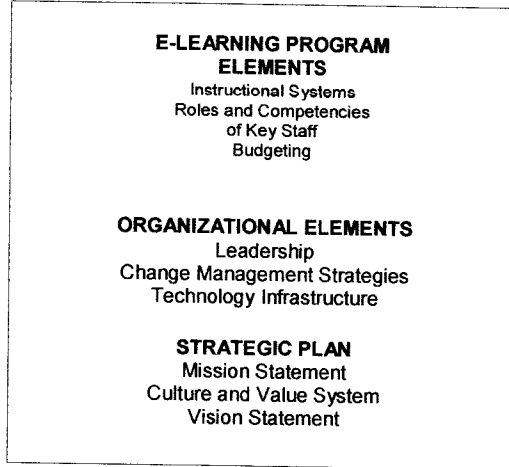
New information and communication technology, specifically computer networked systems, create both a demand and an opportunity for businesses to approach training and knowledge management from new perspectives. These new training perspectives are driven by the need for businesses to provide the right training quickly and efficiently and to support knowledge systems that are current, accessible, and interactive. This article will discuss strategic planning in terms of the organizational elements and the e-learning program requirements that are necessary to build a framework in order to institutionalize and sustain e-learning as a core business process.

INTRODUCTION

The building blocks in a framework necessary to sustain e-learning and knowledge building begin with a foundation laid out by the strategic plan. The next two building blocks of the framework are the organizational structure and support processes, and the e-learning and knowledge man-

agement system requirements. The elements of the organizational framework include leadership, change management strategies, the technology infrastructure, and the organizational structure. The e-learning program requirements include instructional systems, roles and competencies of key staff people, and budgeting.

Figure 1. Building blocks for implementing and sustaining e-learning



Strategic Plan

To implement and sustain e-learning in the workplace a strategic plan can serve as a dynamic blueprint to guide organizational practices based on the organization's strengths, values, and its mission (Schermerhorn & Chappell, 2000). The strategic plan provides a foundation that supports a learning culture by integrating learning and knowledge management with organizational business processes and business goals. Kilfoil (2003) defines strategic planning as a macro-level tool that involves change and focuses on the future by building a bridge between the organization's current position and its vision of the future based on evaluation of its internal and external environments. Strategic planning is:

- A disciplined, fact-based, decision making process
- Based on an analysis of internal and external contexts and data
- Related to choices on how to commit resources
- Compatible with the vision and mission
- Optimizes strengths and opportunities and minimizes weaknesses and threats (Kilfoil, 2003).

Strategic planning primarily involves two important components: the organizational mission and the vision for the future. Developing these two components requires the organization to analyze its current circumstances and to determine what strategy it needs to move forward and to thrive. According to Rosenberg (2001) vision statements are created through an organization-wide consensus-building activity and then refined by senior management.

The vision identifies how the organization will conduct business in the future. Rosenberg (2001) describes the mission statement as a "succinct, specific and powerful articulation of the steps the organization will take to reach its vision" (p. 297). The vision statement of an organization that intends to position itself as an e-learning organization of the future needs to determine how it will provide support and direction for the initiative.

Gap analysis and SWOT analysis are tools that can assist in identifying what an organization needs to do in order to implement and sustain e-learning as a business process (Rosenberg, 2001; Schreiber, 1998). The gap analysis identifies disparities in current e-learning status with those outlined in the vision statement. The SWOT analysis looks at the internal environment and identifies strengths and weaknesses while looking at the external environment to identify opportunities and threats (Rosenberg, 2001; Schermerhorn & Chappell, 2000).

Rosenberg (2001) explains that an organization can build a foundation for e-learning strategy that reinvents the training model. This model can encompass knowledge management, a learning architecture, the organization's technology infrastructure, a learning culture, and a sound business case (Rosenberg, 2001). These ingredients are key to sustaining e-learning over the long term because they institutionalize learning, support it with technology, and link learning to business goals. The blend of organizational learning programs linked to improved business goals as a strategic plan is

the foundational building block in a framework to implement and sustain e-learning.

Organizational Issues

The second building block in a framework to move through the stages of technological maturity and to sustain distance training and knowledge management includes a commitment to strategically blend strong leadership, change management, a networked electronic technology infrastructure, and the organizational structure with the goals put forth in the mission and vision.

Training and knowledge management must be viewed as a core business process. According to Conner and Clawson (2003), in order to remain competitive, organizations need to adapt quickly to changing environmental factors. As a result, training and knowledge are critical to growth and survival. From an organizational perspective, this means developing a plan that includes training and knowledge management as integral system components that produce outcomes that are needed to reach business goals. Institutionalizing learning by gaining stakeholder buy-in is critical here. Ensuring access to learning systems, highlighting the personal benefits of e-learning, and illustrating improved business outcomes are methods that can be employed to gain stakeholder buy-in.

E-Learning Maturity Model

E-Learning can be defined as the use of computers, digital media, and communication and Internet technology to deliver learning or training solutions that enhance knowledge and performance (Berge & Kearsley, 2003; Rosenberg, 2001). According to Berge (2001), two primary benefits of e-learning are that it tailors learning to the individual needs of each learner by offering just-in-time and just-for-me learning, anytime and any place. This is a unique difference between e-learning models and traditional training as well as historical distance education models. Learning materials in tradi-

tional models are often outdated before they can be implemented into work functions (Rosenberg, 2001). Traditional delivery methods are often costly, synchronous events that halt workplace productivity and require travel expenses for learners and instructors (Rosenberg, 2001).

Schreiber (1998) provides a model of organizational technology maturity stages:

- **Stage 1:** The organization supports sporadic distance learning events.
- **Stage 2:** The organization has sufficient technological capability to support distance-learning events. When these events occur, they are replicated through an interdisciplinary team that responds to different staff/management inquiries and recommendations about distance learning.
- **Stage 3:** The organization has established a distance learning policy such that a stable and predictable process is in place to facilitate the identification and selection of technology to deliver distance training.
- **Stage 4:** Distance learning has been institutionalized in the organization. Distance learning policy, communication, and practice all are aligned in such a way that business objectives are being addressed. The organization has established a distance learning identity, and it conducts systematic assessment of distance training events within an organizational perspective.

These stages are designed to measure organizational maturity and capability in terms of maximizing the use of technology, institutionalizing e-learning, and linking learning outcomes to business goals (Schreiber, 1998).

Leadership

The transformation from traditional learning models to e-learning requires strong leadership. According to O'Rourke (1993), individuals in

leadership positions might be senior administrators, top-level teaching staff, training managers, or human resource managers. Whatever the title, these individuals must have the ability to create and communicate the vision for change, implement change, and guide e-learning through its growth process. This includes conducting an environmental scan, securing funding, overcoming barriers, and recruiting and retaining key staff.

During the strategic planning process, leaders analyze external and internal environmental factors affecting the organization. Gap analysis and SWOT analysis of the current situation are highly effective tools here. Gap and SWOT analysis guide strategy planning designed to overcome barriers to building and sustaining distance training (Rosenberg, 2001; Schreiber, 1998). They aid in positioning distance training as a business process by identifying opportunities, clarifying goals, and highlighting strengths. Berge (2001) describes this process as developing an innovative roadmap that includes budgeting, funding support, infrastructure, communication, human development, and policies and procedures.

A crucial role of leadership is to gain support from top-level management in order to ensure proper funding for sustaining the program. One method of accomplishing this is to show how e-learning outcomes positively affect business. External issues concerning competition, the product market, and government activities are some primary considerations for top-level management. Leaders need to show that these issues also drive the training needs of the organization. From an internal perspective, leadership needs to promote a shared vision of where the organization wants to go and how it will conduct business in the future.

Leadership must develop strategies that overcome any barriers to implementing and sustaining the technology initiatives. According to a survey conducted by Berge, Muilenburg, and Haneghan (2002), resistance to e-learning is greatest during the early stages of organizational maturity,

and their ranking changes as the organization progresses through the maturation process. The following list shows Berge and Kearsley's (2003) list of challenges to e-learning:

- Time and costs associated with the development of e-learning
- Demonstrating return on investment for e-learning
- Formalizing the processes associated with e-learning
- Keeping up with rapid changes in technology
- Finding and retaining e-learning staff
- Identifying what training needs can be met best by e-learning
- Creating and maintaining interest in e-learning
- Providing the technical support needed
- Misconceptions about e-learning that result in under-use or overuse
- Budget or resource limitations
- Inadequate bandwidth for complex applications
- Need for instructor acceptance of e-learning
- Getting employees to make time for e-learning
- Too much time spent on developing the technology and not enough on instruction
- Lack of consistent direction, support, or involvement from management or senior management.

To combat this resistance, leaders must communicate the benefits of e-learning and encourage involvement from all stakeholders. According to Conner and Clawson (2003), leaders that support and focus on institutionalizing learning can inspire ordinary people to accomplish extraordinary things. Another important task for leadership is to recruit, support, and retain a team of competent technology and instructional professionals and to have them work collaboratively in order to build and support the e-learning initiative.

According to Berge and Kearsley (2003), frequent personnel changes on the champion level can stifle the growth and development of the e-learning initiative. Troha (2002) advises leadership to clearly define the roles and responsibilities of team members to minimize resentment and overlapping of tasks.

Change Management

Four elements necessary to sustain e-learning in an organization are culture, champions, communication, and change (Rosenberg, 2001). In order to achieve a level of technological maturation, an organization can use a change management approach that builds a learning culture, identifies champions, and creates open communication channels to promote the initiative (Rosenberg, 2001). Change management strategy involves assessing the organization to determine its capability to transform into an organization that values learning and is willing to use technology to meet communication and learning goals.

Change management is first about people. It involves assessing the real levels of organizational support and resistance to e-learning. This support or resistance is influenced by knowledge of selected technology and the desire to change familiar behaviors (Snider, 2002). An assessment reveals administrators, managers, and other key players regarded as champions, who can be used to communicate the benefits of e-learning and to gain the trust of workers throughout the organization. It also assesses what actually needs to be taught and learned and what technology and methods would best deliver it and support users (Snider, 2002).

Critical to sustaining e-learning is whether it will be accepted into the organizational culture. Conner and Clawson (2003) define organizational culture as "the shared history, expectations, written and unwritten rules, values, relationships, and customs that affect everyone's behavior" (p.6). They further explain that "the organizational

culture stands between the leader's intentions and the results the organization achieves" (p. 6).

A primary cultural barrier to e-learning is that e-learning methods do not feel like traditional training events. Equally important here is that people within the organization do not perceive training time as work time. Rosenberg (2001) suggests nine strategies that pull rather than push an organization toward becoming a learning culture and help to overcome barriers:

- Make direct manager accountable for learning
- Focus at the enterprise level
- Integrate learning directly into work
- Design well and certify where appropriate
- Pay for knowledge
- Everyone's a teacher
- Get rid of the training noise
- Eliminate the ability to pay as a gatekeeper
- Make access as easy as possible

Cross (2003) focuses on learner acceptance of new training methods and suggests that the failure of e-learning to take hold in many organizations is that it is not promoted properly. Cross (2003) contends that e-learning should be marketed internally as a consumer product in order to increase acceptance. Although this strategy is suggested for the learning audience, it could be equally effective in selling the idea to upper management and other stakeholders, because it applies proven marketing techniques such as branding, positioning, segmenting, and promoting to increase acceptance.

Technology Infrastructure

The technology infrastructure entails more than just hardware and software solutions. McGraw (2001) defines the infrastructure as the foundation of e-learning that incorporates the organizational culture, values, activities, and structures. Bement (2007) describes the next revolution in organiza-

tional infrastructure as cyberinfrastructure and defines it as the “engine for change for the next revolution” in information technology and organizational infrastructure. Bement (2007) further explains that cyberinfrastructure is a user-centered, collaborative creation, dissemination, preservation and application of knowledge within an organization which facilitates creation of learner communities.

The infrastructure is supported by a shared vision, policy, and language that define the procedures and interpretations of e-learning (McGraw, 2001). Common language and governing principles work together to sustain e-learning. According to Rosenberg (2001) and McGraw (2001), there are practical guidelines that are critical to the e-learning organizational and technical infrastructure.

Most important is access to standardized technology hardware, software, and learning materials by all users anytime and anywhere (Bates, 1995; Rosenberg, 2001). The IT department must ensure that all users have a computer, intranet and Internet access to organizational knowledge stores through a web portal as well as access to training materials through a learning management system.

Another key ingredient is a collaborative relationship between the information technology (IT) department and the training department in order to ensure appropriate content that is interactive, consistent, individualized and linked to organizational policies and values (McGraw, 2001; Rosenberg, 2001). The IT department is responsible for building and maintaining the technical aspects of access, speed of connectivity, platform selection, integration, functionality and compatibility of the technology infrastructure. IT support is critical to e-learning, and all activities and decisions must be coordinated with the IT staff. However, McGraw (2001) suggests that the infrastructure is the sum of business strategy, architecture, organizational legacies, and learner needs. Failure to not view infrastructure as more than technology and any

lack of access to the infrastructure can cripple the e-learning effort.

Organizational Structure

The placement of an instructional design unit can greatly affect its success (Lent, 1990). The unit should be placed as closely as possible to its targeted audience. Lent (1990) advises that a training unit with a mandate to improve overall business should be placed highly in the organizational hierarchy, close to the power base, highly visible, and have access to key decision makers. Conner and Clawson (2003) advise that technology must be viewed as a tool playing a supporting role in enhancing learning and communication within the organization.

The social network of people within the organizational structure is the crucial factor in interpretation and application of the learning delivered via that technology. This social network component cannot and should not be automated (Conner & Clawson, 2003).

Berge and Schrum (1998) advise that institutions interested in distance education develop a strategic plan. Some steps they suggest to answer critical questions about current circumstances and desired outcome might be:

Resources Inventory

A first step is to take an inventory of resources such as available hardware, software, distance delivery technologies, technical and faculty support staff, and identify any technology-enhanced learning projects already functioning.

Financial and Market Assessment

A thorough review by the advisory committee of the strategic financial planning and opportunity costs should be made. Often, an outside consultant is hired to expedite this strategic assessment process.

Evaluation of Academic Standards and Roles

Establish a timetable for the roll-out of specific courses/programs and ensure equitable distribution of learning resources for

Program Requirements

The final building block in a framework to implement and sustain e-learning is the e-learning program. This involves implementing an enterprise learning system with a focus on instructional design processes that assess organizational business needs and links them to training outcomes. It also includes an administrative process that manages a team of specialists to facilitate a collaborative work environment. Merging the organization's technological infrastructure and learner access to instruction are key program considerations. Equally important are budgeting and costs justification functions.

Learning and Knowledge Management Systems

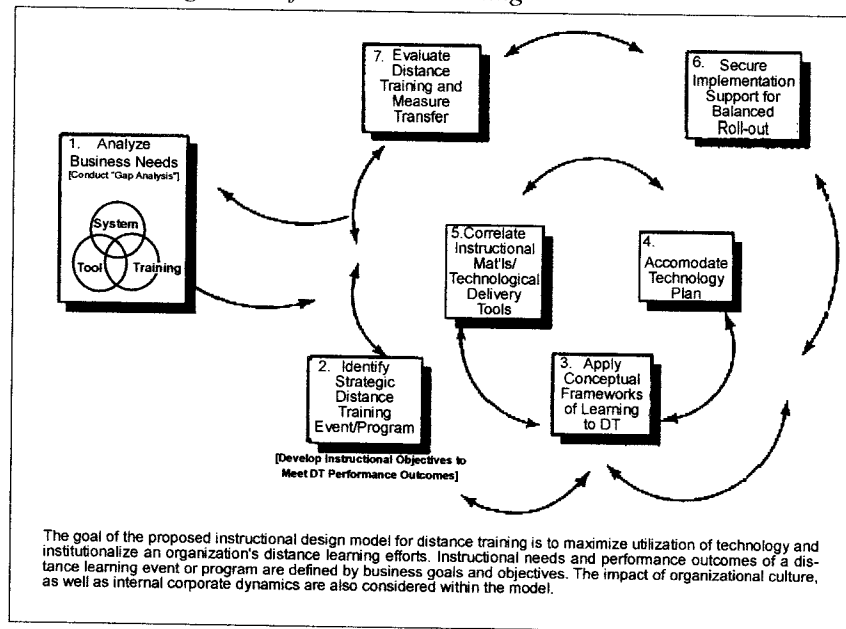
It is important to consider that not all training should be delivered online. The tasks analysis performed by an instructional design team can determine what should be delivered through e-learning and what should be delivered through traditional or other means. According to Waller (2003), organizations with goals to deliver training effectively and at lower cost can use e-learning as a component of an overall blended learning strategy. Snider (2002) suggests that all good solutions are blended and grounded in behavioral outcomes, not necessarily in content or pedagogy.

Bates' (1995) ACTIONS model provides further guidelines and considerations for selecting and implementing technology and learning formats:

- **Access:** How accessible is a particular technology for learners? How flexible is it for a particular target group?
- **Cost:** What is the cost structure of each technology? What is the unit cost per learner?
- **Teaching and learning:** What kinds of learning are needed? What instructional approaches will best meet these needs? What are the best technologies for supporting this teaching and learning?
- **Interactivity and user friendliness:** What kind of interaction does this technology enable? How easy is it to use?
- **Organizational issues:** What are the organizational requirements, and the barriers to be removed, before this technology can be used successfully? What changes in organization need to be made?
- **Novelty:** How new is this technology?
- **Speed:** How quickly can courses be mounted with this technology? How quickly can materials be changed?

Learning management systems (LMS) and Web portals are organization-wide components of the technology infrastructure that manage, monitor, and maintain electronic data and communication (Rosenberg, 2001). Although the technical responsibility for the system rests with the IT department, organizational learning is a combination of formal and informal activities that run horizontally and vertically through the entire organizational structure (Snook, 2003). According to Snook (2003), this means that the LMS and portals need to be integrated with all other business processes to support a learning culture and to benefit the organization. A high level of collaboration between the IT staff and the e-learning team is necessary during all stages of design, development, and implementation of learning and knowledge solutions.

Figure 2. Instructional design model for distance learning



LMS can be developed in-house or contracted out. There are advantages and disadvantages to either choice. Troha (2002) and Snider (2002) advise that selecting a provider is a challenging decision that should be planned carefully and that no single vendor can deliver all solutions. Troha (2002) suggest that organizations:

- Develop and confirm precise, comprehensive selection criteria before meeting prospective providers.
- Use a preliminary design document and selection criteria to interview prospective providers.
- If new to e-learning, start small by limiting the financial commitment to a small initiative.

Design, development, and technology delivery of the learning content is the main task of the training department. Schreiber's (1998) instructional design model for distance training (IDM-DT)

provides a reiterative systems processing model for developing and implementing distance training. This is a systems approach that bases performance outcomes and training needs on business goals and focuses on determining the most effective use of technology. It serves as a good model for organizations that are considering implementing and sustaining distance-learning systems.

Applications

New Web 2.0 applications, information and communication technologies such as simulations, gaming, blogs, wikis, podcasts, PDAs, forums and instant messaging offer new options for communication and interaction as well as management of learning (Madden & Fox, 2006; Willis, 2007) However, they all rely on four basic delivery options:

- **Voice:** Instructional audio tools include the interactive technologies of telephone,

audioconferencing, and short-wave radio. Passive (i.e., one-way) audio tools include tapes and radio.

- **Video:** Instructional video tools include still images such as slides, pre-produced moving images (e.g., film, videotape), and real-time moving images combined with audioconferencing (one-way or two-way video with two-way audio).
- **Data:** Computers send and receive information electronically. For this reason, the term “data” is used to describe this broad category of instructional tools. Computer applications for distance education are varied and include:
 - **Computer-assisted instruction (CAI):** uses the computer as a self-contained teaching machine to present individual lessons.
 - **Computer-managed instruction (CMI):** uses the computer to organize instruction and track student records and progress. The instruction itself need not be delivered via a computer, although CAI is often combined with CMI.
 - **Computer-mediated education (CME):** describes computer applications that facilitate the delivery of instruction. Examples include electronic mail, fax, real-time computer conferencing, and World Wide Web applications.
- **Print:** is a foundational element of distance education programs and the basis from which all other delivery systems have evolved. Various print formats are available including: textbooks, study guides, workbooks, course syllabi, and case studies. (Willis, 2007)

These new technologies encourage learner centered and learner engaged training and knowledge management. They enhance the mandate of traditional distance education by providing real time

interaction and communication to users who are mobile and connected through wireless technology. Organizations can utilize these technologies to provide access and training materials.

Staffing

An e-learning organization requires staff input from a variety of competency areas. Staff can belong to the organization or be external to it. O'Rourke's Roles and Competencies Report can serve as a guide for e-learning staffing needs and activities. According to O'Rourke (1993), staffing areas can be grouped by category according to the roles and the competencies they hold.

- **Leadership roles:** Administrators, managers, and senior teaching staff with vision and access to financial support.
- **Administrative roles:** Directors, managers, and project leaders who identify training needs, recruit staff, and handle finances.
- **Teaching and course development roles:** SME; instructional and graphic designers; media specialist with knowledge of technology, content, and learning theory, and may not have direct contact with learners.
- **Teaching, tutoring, and student support:** Mentors, facilitators, or teacher with direct contact to learners, materials, and delivery technology. Need interpersonal skills and ability to communicate the organization's perspective to learners.
- **Logistics and coordination:** This area would include IT and technology infrastructure and handles registering students and ensuring that materials and technology are accessible.
- **Research and evaluation:** Monitor, test, and review results of training evaluation.

When compared, traditional training and e-learning staffing needs differ in critical ways. These differences result from the fact that e-learning

ing uses networked computers to deliver content and knowledge instead of the lecturer mode. This changes the role of the subject matter expert (SME) to a content developer who may or may not have direct contact with the learners. It also creates the need for a team of specialists that is familiar with adult learning theory, computer technology, and instructional design theory, among other areas.

Some staff services also can be outsourced to vendors. The benefits of outsourcing services are reduced cost in the areas of salaries for technical staff, development and delivery technology, overheads, and some content or training solutions (Rosenberg, 2001). Outsourcing allows an organization to devote its resources to developing staff in other areas. Organizations must have a solid knowledge of vendor products and services as well as an understanding of what solution the organization needs. Staff dedicated to researching, negotiating, and contracting with vendors is essential.

Budget and Cost Justification

This is one area that gets the full attention of upper-level management, because it requires a substantial monetary investment that must be justified by linking e-learning outcomes to business goals. Upper management will want verification that the program will show a return on investment (ROI) and reduce training cost, and that it is cost-effective and cost-efficient (Raths, 2001). The goal of leadership and champions is to promote training as an investment in order to secure funding support for distance training (Berge, 2001). According to Carliner (2000), champions may thoroughly un-

derstand the benefits of e-learning, but the costs and organizational disruptions associated with it have a sobering effect on executives.

Carliner (2000), therefore, suggests presenting the proposal as a business case or a request for project investment that identifies costs and returns and compares this with other potential investments. This might include:

- Research and compare relevant alternatives such as traditional methods.
- Show all component costs such as instructional design and authoring software.
- Present realistic return projections based on market rates and real enrollment data.
- Explain technical concepts in familiar terms.
- Recommend a course of action and outline benefits (Carliner, 2000).

Bates (1995, pp.1-2; 2000) cautions that student numbers and long term planning are essential to selecting technology. Cost are divided into fixed capital costs and variable operating costs which include technology infrastructure, administrative applications and academic applications costs (Bates, 2000, p.122). Bates (2000) further suggests that e-learning will initially require high fixed cost but variable cost will decrease as student enrollments increase (see Box 1).

Whalen and Wright (1999) indicate that the breakeven point, the point at which costs are recovered, and return on investment, which illustrates the economic gain or loss from having undertaken a project, are two common measures of financial performance that can be used in costing e-learning.

Breakeven Number of Students

To offset the high fixed costs of Web-based courses, a certain number of students must be trained at a delivery cost per student of less than that of the delivery cost per student for classroom

Box 1.

Bates' formula for calculating cost is: $\$ = t / h \times n$
\$: cost per student hour
t : total cost of materials
h : hours spent studying
n : number of students (Bates, 2000 pp.126)

training. The number of students that offsets the fixed costs of Web-based training is the break-even point.

Return on Investment

The return on investment (ROI) is the percentage that represents the net gain or loss of using Web-based training instead of classroom delivery. For example, an ROI of 300 percent means that \$3 was saved in reduced delivery costs for every \$1 spent on Web-based training (Whalen & Wright, 1999).

Distance education literature has always noted economies of scale as a primary benefit of distance learning structures. Because the same materials can be delivered repeatedly to increasing numbers of students, distance education realized lower development cost as student numbers increased (Bates, 2000; Moore & Kearsley, 1996). The demands of corporate training coupled with delivery via computer and Internet technology change that distance learning scenario (Rumble, 1992). Additionally, according to the Technology Costing Methodology Handbook (Jones, 2001) and Rath (2001), both higher education and traditional business training are notorious for their inability to classify and justify costs. Knowledge management and e-learning can allow systems to tailor information to specific learner needs. They also require constant updating of electronic information.

Consequently, e-learning cannot rely on traditional distance education economies of scale arguments to justify costs. Rosenberg (2001) uses Hammer and Champy's four success criteria for business performance—cost, quality, service, and speed—as a means to justify e-learning. According to these practitioners, the value of e-learning can be measured by how well these criteria enhance business performance. Justification of e-learning also can be shown in terms of gains in productivity hours or time saved and increased and better worker productivity.

According to Rath (2001), e-learning professionals are inventing bottom-line-oriented tactics to measure and justify e-learning. These include measures such as time to competency, achieved competency, and return on expectations. Kraack (2003) notes that lower direct costs, such as travel expenses, facility overheads, instructor fees, publishing costs, and lower program tuitions, are well-known ways that e-learning reduces training expenses.

Opportunity costs resulting from productivity gain is another area that results in reduced costs. According to Kraack (2003), industry standards indicate that one hour of e-learning is as effective as two hours of traditional training. E-learning workers spend less time away from work and receive training en masse, which results in more productivity time and faster application of learned material (Rosenberg, 2001).

CONCLUSION

The building blocks in a framework to implement and sustain e-learning and knowledge building begin with a strategic plan. The process of developing a strategic plan involves analyzing the internal and external environments in order to help the organization determine what the current situation is and how it sees itself doing business in the future. The two components that guide the future activities of the organization are the mission statement and its vision of the future. Once this strategic foundation is laid, the organization can go about the business of transforming itself into a learning culture that maximizes the use of technology and depends on the investment in learning to produce outcomes that further business processes and goals.

The next building block in the framework is the organizational elements. Strong leadership to oversee a change management program, the technology infrastructure, and the recruitment and support of key staff to champion and communicate

about the e-learning initiative are key elements here. A primary function is to actively inform all stakeholders about the vision of becoming a learning organization of the future. This means involving them in the development, implementation, and future use of technology by outlining personal and organizational benefits. Support for this effort comes in the form of an interactive technology infrastructure with the role of supporting human communication networks.

The third building block is the distance training and knowledge management system. This is the merging of the organization-wide learning management system, the instructional system's design program, and the IT department. This combination of entities ensures organization-wide access to individualized information files, quality learning content, and support of business goals, all while utilizing technology to become a learning organization of the future. The reach of the learning program becomes global, with access to just-in-time and just-enough training and information available at all times. Instructional design of program content ensures that the right training is delivered via the correct media and method to the right people. The IT and LMS functions ensure that it is easy to use and allows collaboration between users. In order to successfully position itself as an organization of the future that values and supports learning, a business needs to see training as an investment and look to its outcomes to further its business goals.

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