Corporate e-Learning and Knowledge Management

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I. Introduction

Learning and knowledge transfer have been core competencies of successful organizations throughout the history of modern business. Corporations which recognize the critical importance of having a comprehensive learning plan for their organization have a distinct advantage over those organizations which feel that learning and knowledge management will happen without careful planning. Corporate learning tools and techniques are rapidly changing. “Prior to the late 1990’s, training infrastructure in most companies consisted of a training management system, the early predecessor to the LMS (learning management system), as well as content deployed on a local area network or CD-ROM” (Howard, p.51). The decreased costs of technology and communication, along with increased technological capabilities and geographic distribution of the workforce, have all contributed to a move toward corporate e-learning.

The term e-learning refers to learning delivered via an electronic method. “E-learning describes an alternative to one-to-one classroom sessions. It provides enterprise-wide solutions through the usage of a set of tools and techniques. It reduces the learner’s training time which saves the cost related to training. It also maintains training consistency” (Agarwal, Deo, & Das, p.2). The term e-learning was preceded by similar labels such as Internet-based training, Web-based training, and online learning.
Examples of e-learning include:

- A digital library of self-paced training modules with integrated assessment and tracking
- Videotapes of live learning sessions.
- Online knowledge database
- Net-meetings
- Collaborative environments to facilitate knowledge creation
- Compliance training and tracking

II. Foundations of Corporate Learning

The discussion of corporate e-learning must be preceded by an understanding of corporate learning in more general terms. Corporate learning can be defined as any organizational activity, structured or unstructured, which supports the exchange of knowledge among members of the organization. Regardless of the delivery method of a learning program,

“building and maintaining an effective workforce capable of responding to the challenges of today’s workplace demands providing the right knowledge at the right time to the right people. It means getting away from providing a pre-set program of instructor-based or online learning and creating a ‘competency-based learning culture’.” (Deieso, p.84)
Creating an effective corporate learning program begins with creating a well-informed plan. Strategic management of knowledge through learning begins with a series of questions:

- What are the specific, measurable learning goals and objectives?
- Who are the members of the organization being targeted for learning and what are their learning characteristics?
- How do the learning goals fit into and support the organization’s overall strategic plan?
- What value will the learning plan provide to the organization?
- What is the calculated return on investment?
- From an operational standpoint, how will this plan be implemented?
- What is the process for review and revision of the learning plan?
- How will the cost associated with the learning plan be allocated?

A well formed learning plan must also give consideration to knowledge management goals, corporate culture, management buy-in, and budgetary constraints.

The type of knowledge that a learning program attempts to transfer is an important factor in designing the learning system. Explicit knowledge is generally simple to express and formalize, and may already exist in the organization, for example in the form of product manuals or human resource
guidelines. Tacit knowledge is often difficult to express and “is deeply rooted in each individual’s actions and experiences, as well as in the ideals, values, and emotions they embrace. The subjective and intuitive nature of tacit knowledge makes it difficult to process or transmit the acquired knowledge in any systematic or logical manner” (Desouza, p.86). In this regard, corporate training faces three major challenges: 1) extracting tacit knowledge which already exists in the organization, 2) making that knowledge explicit through the training program, and 3) presenting explicit information through the training program in such a way that it facilitates understanding and creation of tacit and explicit knowledge.

The level of learning that a program is attempting to achieve is also an important factor in designing the learning system. Bloom’s Taxonomy cites the following levels of learning: knowledge, comprehension, application, analysis, synthesis, and evaluation (Bloom, pp.201-207). If a learning program is focused on transfer of an entry-level skill (knowledge), the approach to learning is far different than if the learning program is focused on how to evaluate and purchase costly corporate assets (evaluation). The idea of levels of learning indicates that corporate learning should take place at all levels of an organization. While new employee training is important, learning should not be constrained to the initial phase of employment. Continual upgrading of skills and knowledge benefits not only the employee, but it also benefits the organization as a whole and the organization’s knowledge base.
Creation of a learning system must take into consideration the ratio of the number of teachers to the number of students involved. A learning plan for one-to-one interaction is different from that of a small group learning environment, which is in turn different from a lesson delivered to a large or distributed group. One-to-one interaction is usually tailored specifically to an individual student, with room for adaptation based on the student’s response. Small group scenarios can involve lecture by a teacher, limited interaction on the part of students, or interaction almost exclusively between the students with the trainer acting as a moderator for group members who are essentially teaching each other. Large group or distributed learning must be flexible enough to meet the needs of a diverse group of people, provide closer interaction when necessary, provide an opportunity for feedback, and track both completion and performance issues.

Once a learning plan has been devised, the actual learning program must be created, specifically the interface and the content. Depending upon the size and needs of the organization creating the learning material, the interface creation can be done in-house, outsourced to a consultant, purchased off-shelf, or a combination of these methods. Content for the learning program may be difficult to obtain, particularly when the learning plan requires organization-specific knowledge, whether tacit or explicit. The knowledge must be
extracted and presented in a useful manner, and outlining how to make that happen is a critical factor in an organizational learning plan.

III. E-Learning

“E-learning is not simply a case of transferring old offline methods online. It’s a different medium that needs to be used accordingly. The majority of early e-learning efforts were adaptations of text-based training delivered electronically. They did not make use of the interactive power of electronic delivery, such as video, sound and simulations, but merely replaced text books with computer screen text books, reducing users to reading scrolling text” (Hansen, p.34). In recent years, the falling cost of communication and technological advancements have made a variety of e-learning options viable alternatives to traditional corporate learning methods. Some advantages of e-learning are that it:

- Can be more cost-effective than some traditional methods
- Can work well with a geographically dispersed group
- Can be altered for different learning styles
- Can be accessed at a time and place that is convenient to the student
- Can incorporate individual performance tracking information
- Can reach large groups of people in a short period of time.
In recent years, the cost of online learning has diminished and “when companies move away from classroom learning, they go first to asynchronous e-learning—the least expensive delivery method” (Rowan, p.51). While cost is certainly an important factor in the move to e-learning, flexibility in timing and the ability to reach a large audience were actually ranked higher as deciding factors in the switch to asynchronous e-learning (Fig. 1) (Rowan, p. 52).

![Figure 1-Drivers for Asynchronous E-Learning](image)

For companies considering a move to e-learning, it is important to remember that cost should not be the only motivating factor in this decision. Incorporation of e-learning into an overall corporate learning and knowledge management strategy should take place because e-learning is the best solution to a specific learning need, not just because it is cost-effective. Organizations must also be sure to consider the total cost of an e-learning initiative. The
appeal of lower travel costs should not cause an organization to overlook the
start-up costs of an e-learning alternative. Switching to an e-learning program
involves direct costs such as program creation and technology acquisition, and
indirect costs such as employee time devoted to the creation of the e-learning
program.

When deciding which types of e-learning to incorporate into an
organization’s overall learning strategy, it is important to continually tie
that strategy into the organization’s overall knowledge management
goals. In order to support broader organizational goals, a successful
learning strategy must:

- Have strategy buy-in from senior management
- Integrate e-learning into the management process
- Align the learning to meet the requirements of employee
  roles
- Make the process simple to use
- Establish an environment that supports the learner
- Set the right expectations
- Modify communication processes and be prepared for
  setbacks (Palmer, p.5).
The type of e-learning to be included in an organization’s overall learning strategy should be chosen to specifically support the type of knowledge transfer that the organization is attempting to achieve. For example, learning on the lower end of Bloom’s Taxonomy (Bloom, pp. 201-207), such as knowledge or comprehension, may involve transfer of more explicit knowledge, and might work well with e-learning packaged as a library of online modules. Employees can move though the modules at their own pace, regardless of their geographic location, with performance tracking and module completion transmitted directly to their training managers. Learning at the higher end of Blooms Taxonomy, such as synthesis and evaluation, may involve transfer of more tacit knowledge, and requires a very different e-learning approach. An e-learning approach for this example might include group work and mentoring via net-meetings, video conferencing, and a learning plan which is less structured and allows for a high level of interaction between trainers and students. The key in both of these examples is to specifically tie the type of learning to the pre-determined learning goals.

IV. Beyond E-Learning

E-learning encompasses a variety of tools and techniques, which when appropriately matched to an organization’s learning needs, can be beneficial to the maintenance and growth of the organization’s knowledge base. It is important, however, for an organization to utilize e-learning techniques
because they are the best choice for the organization as determined by the strategic learning plan. Choosing e-learning simply because it allows for the latest, flashiest technology will result in a poor return on investment if the learning technique is not matched closely to the learning need. Often the best choice for a corporate learning plan is a unique, tailored combination of traditional learning techniques and appropriate e-learning techniques, an approach which is referred to as “blended learning”.

Another variation of e-learning is rapid e-learning. “Rapid e-learning does not mean rapid development. Rather it is a new category of content development that enables SMEs (subject-matter experts) to quickly build content, often using the training staff as coaches and assistants in the process” (Bersin, p.22). Rapid e-learning is often used in a situation where an urgent learning need is detected, and a solution must be created in a short period of time. However, this method of employing subject-matter experts to create content can be utilized in a variety of learning programs. The experts are guided by training professionals who can help pull out tacit knowledge, making it explicit through training materials such as video.

“Digital audio and video recordings are now easily made, and an expert may find that speaking to a camera or microphone is easier or more convenient than writing, particularly if the video is of a presentation that has to be made in the ordinary course of business, or if the audio recording can be made in an otherwise
unproductive free moment. It is also now relatively easy to
distribute audio and video over networks.” (Marwick, pp.820-821)

Traditional learning, e-learning, rapid e-learning and blended learning
can all be considered for inclusion in organizational learning programs.
The critical factor is choosing the best combination of methods to
support the organization’s learning and knowledge management goals.

V. Impact of Geographic Distribution on e-Learning and Corporate KM

The lower cost of communication and advances in technology means that it is
possible, perhaps even common, for an organization to have a geographically
distributed workforce. For example, why should a company have their entire
sales force based out of the corporate offices in a single city? It is far more cost
effective to hire salespeople who live in different parts of the country and
work out of their homes. Corporate overhead is reduced, and travel expenses
are cut dramatically with a geographically distributed sales force. The sales
people can be hired based on their experience and potential for productivity,
instead of being hired based on their willingness to travel extensively. And e-
learning makes all of this possible. Activities such as product training can be
accomplished through online modules; professional development might be
facilitated via monthly video conferences or net-meetings.
Corporations which have offices and factories in geographically dispersed locations are not a new phenomenon, but advances in communication and other technology have certainly made this distribution more common. A company with multiple offices still has the advantage of regular interaction between employees, fostering the exchange of existing knowledge, both tacit and explicit. There is also a greater likelihood of spontaneous knowledge creation resulting from everyday interaction in the workplace when employees work in the same physical space.

Employees are working from their homes in increasing numbers, and this raises a unique set of knowledge management and learning challenges for organizations with this type of dispersed workforce. According to the U.S. Department of Labor, “nearly two-thirds of persons who work at home at least once per week in 2004 were employed in management, professional, and related occupations. The next most common occupational group was sales and office” (Fig. 2) (Bureau of Labor Statistics).
E-learning for employees working out of their homes adds a unique set of challenges to an organization’s knowledge management goals. Communication in an organization may be increasingly electronic, but there is still a need for face-to-face communication which helps build personal relationships, fosters reputation building, and allows development of trust between colleagues. Face-to-face communication also facilitates spontaneous knowledge sharing, a valuable asset for any company. Organizations which rely on employees working out of their homes need to be proactive in finding alternatives to face-to-face communication. “Firms that initiate virtual office programs should at least encourage workers to be in the office on the same days, identify ways to make up for lost interaction, and educate workers on effective knowledge transfer through computers and telephones” (Davenport & Prusak, p.91). Once again, organizations need to make sure they articulate learning goals and
plans, finding a complementary balance between traditional learning and e-learning.

VI. Conclusion

E-learning is still a relatively new learning strategy, and like any cutting edge technology, it is as the technology matures that we learn how best to leverage it. “Effective organizational learning and development still comes down to delivering predetermined outcomes” (“The new look,” p.4). A successful corporate learning program begins with careful analysis of the organization’s overall mission, strategies, and knowledge management goals. Regardless of the type of learning implemented, the program can only be considered successful if it supports the original, over-arching goals of the organization as a whole.