

Enhancing the Quality of Public Administration Training Plan with Knowledge Management

Shih-Hsien Chang

Professor

Department of Public Administration and Policy

National Taipei University

TAIWAN

ABSTRACT

Knowledge management is making a direct connection between an organization's intellectual assets—both explicit (recorded) and tacit (personal know-how)—and positive business results. Its basic processes are to increase, to capture, to refine, to share, and to apply knowledge.

And the training plan is the launch pad for the design and implementation of training programs. The key stages of the training plan are: (1) identification of training needs, (2) description of the required training programs, (3) the appropriate training methods to be used, (4) selection and training of trainers, (5) detailed costs and benefits of training.

This paper discusses enhancing the quality of public administration training plans with knowledge management and concludes with building appropriate knowledge ecology to using knowledge management easily for training plan, and making knowledge performance more efficient in training plan. At its heart, Knowledge Management is not about technology, it is about culture. And unless people with some insight into human behavior get involved, it isn't going to work.

Keywords: e-training, e-planning, knowledge culture, knowledge ecology, knowledge management, training methods, knowledge performance, training plan

Introduction

In the time-to-market quest, the competitive advantage has shifted from the product cycle to the knowledge cycle for most organizations (Krell, 2001:41). Now it is the time to use knowledge management for enhancing the quality of public administration training plan. Training is very important to public organizations for increasing capabilities of human capital. Look the swimming competition at the recent Olympic games in Sydney. Experts predicted that the innovative design of the pool and new high-tech swimwear would help swimmers shatter records. But achieving performance success in the Olympic games is a complex combination of many factors, among which training will make a big difference. And if we improve training quality with knowledge management, it will make a great difference (Cone & Robinson, 2001:32-34).

Knowledge management is making a direct connection between an organization's intellectual assets—both explicit (recorded) and tacit (personal know-how)—and positive business results (Knowledge Praxis).

Its basic processes are to increase, to capture, to refine, to share, and to apply knowledge. To increase knowledge includes to discover, to research, to read, and to

study knowledge. To capture knowledge includes to write, and to record knowledge. To refine knowledge includes to verify, to correct, to update, to augment, to clarify, and to generalize knowledge. To share knowledge includes to present, to publish, to distribute, and to discuss knowledge. And to apply knowledge includes to plan, to decide, to design, to build, and to solve problems (Horton, 2002).

Applying processes mean how we can effect the basic process of knowledge management. In increasing knowledge, it adds to the knowledge of individuals. In capturing knowledge, it makes human knowledge easier to share. In refining knowledge, it improves the quality and usability of knowledge. In sharing knowledge, it multiplies individual knowledge. In apply knowledge, it translates existing knowledge into wise decisions (Horton, 2002).

The training plan is the launch pad for the design and implementation of training programs. A training plan is a practical document which takes into account identified training needs and outlines training programs to meet those needs (Stourt, 1994:41).

This, in fact, represents the first two steps of the training function that are identifying training needs, and formulating (ie planning and developing) required training.

In preparing to write training plan, it is important to outline key stages. The key stages of the training plan are (Stourt, 1994:42):

- (1) Identification of training needs.
- (2) Description of the required training programs.
- (3) The appropriate training methods to be used.
- (4) Selection and training of trainers.
- (5) Detailed costs and benefits of training.

And then, we can use knowledge management in enhancing the quality of public administration of training plans. In figure 1, the inner circle presents the basic processes of knowledge management, each process is used in the stages of training plan. Knowledge management and training plan are combine together. But it is not so easy. This paper concludes with building appropriate knowledge ecology to using knowledge management easily for training plan, and making knowledge performance more efficient in training plan.

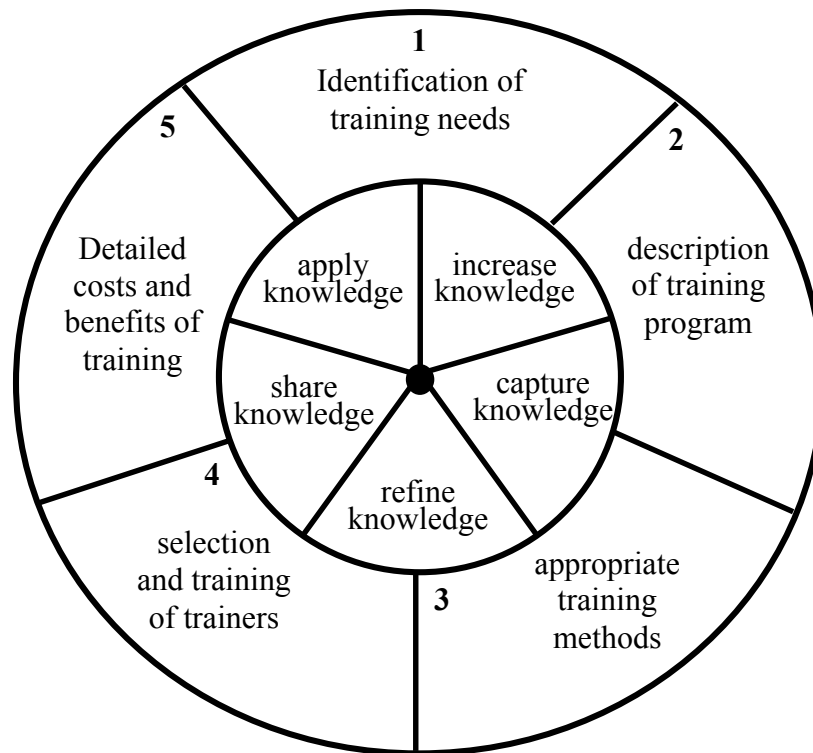


Figure 1 KM in Training Plan

I. Identification of training needs

In recent years, knowledge management (KM) has commanded a lot of lofty thought and impressive posturing as an idealized prospect. Systems have been designed, databases created and intricate strategies concocted under the brave banner of KM. More often than not, however, such efforts have been a bust when deployed in the real world. Knowledge and information aren't static commodities to be packaged and managed. They're living forces that connect to the way people think, learn and communicate—which means organizations have to design knowledge management efforts not around technology, but around the way human beings actually filter, shape, use and add to what they already know (Brown, 2000). And then, knowledge management can be easy to be used for identification of training needs, as well as for other stages in the processes of training plan.

It is important to identify all the training needs within an organization as they will vary according to employee, job position, job responsibilities and department. A thorough analysis of training needs is a prerequisite for the design of any training plan, and ensures that each individual employee is sent on the appropriate training courses.

A training need is usually defined as a gap – the gap between the requirements of a particular job and the capabilities of the employee currently holding the job. (Mayer, 1985:127), as figure 2 shows.

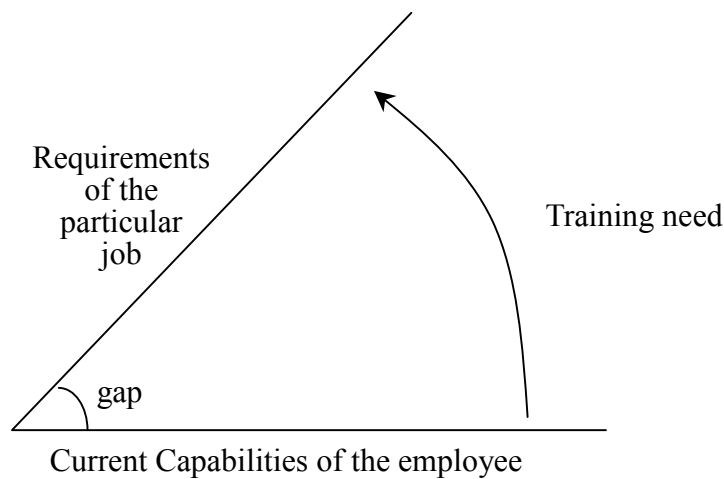


Figure 2 Training need

There are two basic types of training needs: 1.Organizational, and 2.Individual.

1. Organizational training needs

A careful analysis throughout the organization is essential to assess the sum total of training needs. This is to ensure that training will improve performance of the organization as a whole and ensure organizational objectives are met. The gap between achieved results and targeted goals is the training gap.

Determining training needs for the organization involves four basic steps. This process is illustrated in Figure 3.

- (1) To analyze whether organizational targets have been met.
- (2) To determine what knowledge, skills and attitudes are contained within the organization.
- (3) To analyze the actual performance of employees.
- (4) To analyze organizational performance.

2. Individual training needs

Training needs analysis for individuals often begins with an assessment of the job description. Training on an individual basis concerns three key areas:

- (1) knowledge
- (2) skills
- (3) attitude

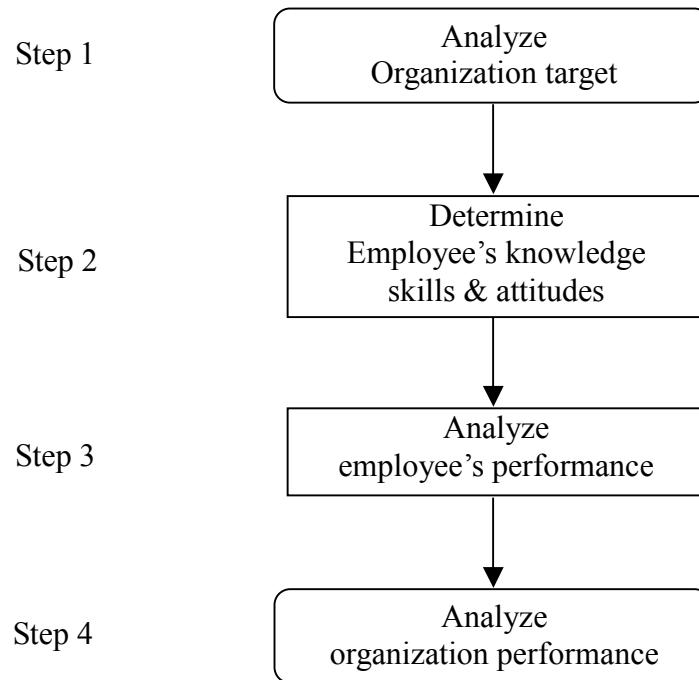


Figure 3 Organizational Training Needs

Figure 4 shows the inter-relationship of knowledge, skills and attitudes and their effect on individual performance.

The planner should use knowledge management to check the following items to identify training needs for the organization and the individual. It is divided into general questions about training within the organization, and specific question about individual performance (Stout, 1993:48).

1. General

- (1) What staff training records are available ?
- (2) Have you assessed staff training records ?
- (3) Who maintains employee training records ?
- (4) Are training records regularly updated ?
- (5) When was a skills inventory last done for each area or department? (i.e clerical, technical, skilled labor, unskilled labor, staff managers, line managers, senior managers, etc)
- (6) When should you next implement a skills inventory?
- (7) How can you best balance organizational needs against current employee skill assets?

2. Individual

- (1) What tasks, knowledge, skills and attitudes must be performed to do each job?
- (2) What knowledge is required? (eg company or product knowledge)
- (3) Which skills are lacking? (eg operator, technical, computer, sales, supervisory, management, coaching, training skills)
- (4) What shortcomings are there in attitude? (eg angers quickly, too timid, too aggressive, speaks before thinking)

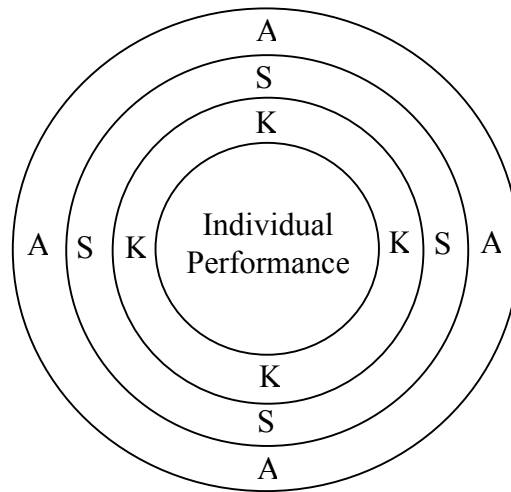


Figure 4 Knowledge, skills and attitude
(Stout, 1993:47)

II. Description of the Required Training Programs

The second step in preparing the training plan is application of knowledge management in selection and design of training programs, which demands much preparation and planning. However, for any training program it is important to take account of the motivation or drive of the trainees. Typical motivating factors might be (Stout, 1993:48-49):

- (1) Desire for expertise or success
- (2) Feelings of intimidation or inadequacy
- (3) Fear of failure or rejection
- (4) The need for approval, recognition, or endorsement
- (5) Desire for material gain
- (6) Sheer curiosity or interest in a new challenge
- (7) Standards of training rooms and facilities
- (8) Quality of trainers and training programs

The planner should use knowledge management to check the following items, in four stages, with the planning and preparation of the training programs (Stout, 1993:49-50):

1. Stage One

- (1) Draw up a summary of training needs – to establish the main areas and priorities for training.
- (2) Do planners have job specifications for each job position?
- (3) Which individuals and which groups need training?
- (4) Have planners involved line managers and staff managers at all stages of planning?
- (5) How will participants be consulted and briefed about the training?

2. Stage Two

- (1) What training programs already exist?
- (2) Which new training programs need to be designed?
- (3) What are the aims, objectives, and program content?
- (4) Which training methods are to be employed?
- (5) What are planners' resources (amount available to spend)?
- (6) What specialized training is required? (eg supervisory, assertiveness, management, etc)

3. Stage Three

- (1) Who are the trainers who will deliver the training?
- (2) What will determine the content of the training programs?
- (3) Who will be responsible for the design of new courses?
- (4) Where will the training take place?
- (5) Who is responsible for monitoring the results of training?
- (6) How will the training be evaluated and assessed?

4. Stage Four

- (1) Who will co-ordinate the administration for the training courses?
- (2) Who is responsible for the schedule of dates and timing for the training programs?
- (3) Which programs will be held on-site and off-site?
- (4) What training equipment is available?
- (5) What additional training equipment needs to be purchased or hired?
- (6) Who is responsible for the training budget?

We can discuss using knowledge management for training programs. According to Dale Zwart, founder of Generation21, "Knowledge management is the structured and intentional collection and distribution of information to support learning." (Lamont, 1989). From its inception, the company of Total Knowledge Management (TKM) system has been oriented toward integrating training and knowledge management. TKM is based on a process of breaking down knowledge into chunks of information called dynamic learning objects. The learning objects are then stored in a relational database and are searchable when employees need an answer. Some clients are already using the wireless capability to access reference materials and common troubleshooting information from the field (Lamont, 1989)

As to curriculum development, knowledge management plays important role in training curriculum designs (Lamont, 1989). Curriculum developers worked with subject matter experts to identify training requirements, design learning objectives, and develop courses. For example, using Generation21's TKM product, the curriculum developers are able to enter the content directly into the system; the process is template driven, and development does not require programmers. Video clips and graphics can be pulled in easily.

"It is a natural evolution in the training field to recognize the value of information that is in the enterprise, storing it and making it available to everyone," says Cox, manager of training at Cape Canaveral. An initial phase of performance support has been completed which links documents that relate to safety with the training curriculum. That step ensures that the individual not only understands procedures but can also access related policies. "We are starting to identify all the pieces that support the work once our students are on the job," says Cox. "Then we expand our performance support resources to include technical information," he adds, "Our workers will have access to a comprehensive repository of materials to assist them in performing skilled tasks." (Lamont, 1998)

The organization is now working on training for the next generation of launch vehicle, the Atlas V, to create a program that manages all of its resources electronically. The system will be able to verify training and certification of employees, track relevant documents and manuals, and monitor workload to be sure human resources are available for the required tasks. It will be the next step in the move toward integrating training with knowledge management.

When you come right down to it, automation is not required for either training or knowledge management. However, if an enterprise has automated its processes, e-learning can be integrated in ways that support business objectives. And if training content and enterprise knowledge both flow from the same source, the organization can achieve a level of responsiveness and consistency that will give it a strong edge over its less well managed competitors (Lamont, 1998).

III. The Appropriate Training Methods

A training plan describes the training methods to be used in delivering training within the organization. The number of training methods available are many and varied, and certain methods may be better suited to training programs. The most appropriate form of training depends on the following variables (Stout, 1993:50-52):

- (1) The training objectives
- (2) The skills, experience and expertise of trainers
- (3) Available training facilities and materials
- (4) The learning abilities of trainees

Trainers should work with the training methods which are best suited to them individually. An alternative is to use team-teaching, or to recruit an external training consultant if a trainer is particularly uncomfortable with a particular teaching method (eg role-playing).

However, a variety of methods will ensure successful and interesting training

programs, and is more likely to satisfy the needs of the organization and the individual. A fairly comprehensive list of what is available to trainers is as the following:

- (1) a lecture
- (2) a demonstration
- (3) a participative lesson
- (4) individual coaching
- (5) a tutor-led group discussion
- (6) role-playing
- (7) critical incident
- (8) training games
- (9) distance learning
- (10) computer-based training (CBT)
- (11) interactive video
- (12) self-teach training manual
- (13) case study
- (14) on-job instruction
- (15) packaged programs
- (16) programmed instruction
- (17) an assignment, task or project

Among the above methods, we should choose computer-based training with knowledge management, although the debate over whether computer-based training is more effective than classroom training has subsided, with an apparent consensus that each approach has its place. So-called “lended learning” uses a combination of instructional techniques, depending on the situation. The Socrates Learning Performance System from LearningFramework (learningframework.com) can be used to augment classroom training by providing a channel for new information and enabling a dialog among members of the learning community. The philosophy advocated by LearningFramework is that content provides the foundation for learning, but that optimal learning occurs only in the application of knowledge. The emphasis on dialog stems from the company in belief that dialog is an important catalyst for application (Lamont, 2002).

In June 2001, Socrates was selected by the Energetic Materials Research and Testing Center (EMRTC) at the New Mexico Institute for Mining and Technology to deliver information to first responders such as law enforcement officers and firefighters. The training, sponsored by the Department of Justice, consists of one week of classroom instruction, with subsequent follow-on information and discussions with colleagues. Over time, the dialogs become part of an up-to-date knowledgebase that is organized by subject area and builds on the shared insights of participants. Although classroom training is part of the program, Socrates can also deliver e-learning content and an associated online learning community (Lamont, 2002).

A learning management system can leverage existing content and business processes to streamline training administration and also ensure achievement of training goals such as compliance with regulatory demands. Alza, a drug delivery technology company, has stringent FDA certification requirements for training staff on equipment and procedures. The company implemented the Plateau LMS from Plateau Systems more than five years ago to track qualification training (Lamont, 2002).

“The system houses all our training information, including course records and each employee’s current status with respect to training requirements,” says Cathy Harnett, a learning and development associate at Alza. Integrated with PeopleSoft, the system is populated with human resources (HR) data such as employee name, title and job code. The job code and training qualifications indicate the training required at any given time.

“Since the Plateau LMS is also integrated with Documentum,” Harnett adds, “the system knows when a control document changes and whether the associated qualifications have also changed.” If new training is required or new forms must be filled out, the Plateau LMS alerts the employee and tracks completion of the task (Lamont, 1998). In short e-training methods are very appropriate in training plan.

IV. Selection and Training of Trainers

Training plans describe the tactics and methods to be used by trainers, but the selection of methods depends on trainer ability and expertise.

Training plan should describe each trainer’s ability to select, design and deliver training programs to meet organizational needs. This will be affected by the following key factors (Stout, 1993:61-63):

- (1) The type of training methods to be used
- (2) Current expertise and skills of trainers
- (3) Trainers’ training needs
- (4) The constraints of the training facilities
- (5) The investment of time and money in trainers

Trainers are required to be competent and proficient in a number of different areas. An analysis of trainer competencies will define what knowledge, skills and attitudes are required by trainers, and what are their training needs (Stout, 1993:61-63):

1. Knowledge competence

The trainer’s role demands competence in many areas of learning. For example, product knowledge, technical proficiency and computer know-how will all depend on the demands of the organization.

The following topics are suggested areas of competence for trainer knowledge. Planner would add other items to the list, if needed.

- (1) Motivations for learning
- (2) How learning can be effective
- (3) Barriers to learning
- (4) Training methods
- (5) Product and technical expertise
- (6) Use of training aids
- (7) Design of training courses
- (8) Methods to evaluate and validate training

2. Skills competence

The following list suggests general skills competence levels. As this list is not definitive, planner can add other items to the list:

- (1) Analysis of jobs and tasks
- (2) Evaluation of training needs
- (3) Preparation and design of courses
- (4) Design and use of visual aids
- (5) Presenter and manager of training programs
- (6) Facilitator of learning
- (7) Production of course handouts

3. Attitude competence

Part of a trainer's role is to observe and evaluate the behavior of trainees. Trainees are as strongly influenced by the attitudes of the trainer as by work environment and corporate culture.

Trainer perception of the training role is biased due to the organization's support (or lack of support) for the training function, and the trainer's personal attitude to training, as the following:

Organizational features

- (1) The culture of the organization
- (2) The style of management
- (3) Leadership effectiveness
- (4) Attitudes of management and colleagues to training
- (5) Support given to training

Personal attitudes

- (1) Personal aims and goals
- (2) Individual motivation factors
- (3) Personal commitment to the job and to the organization
- (4) Ability to change and adapt to situations and people
- (5) Background and experience
- (6) Individual trainer personality

What is most important is to constantly evaluate the effectiveness of the training team, and analyse feedback gained from both trainers and trainees in post-training debriefings. Trainers and training team can be evaluated with knowledge management.

V. Detailed Costs and Benefits of Training

Training plan should include a final section on (Stout, 1993:53-54):

- (1) The financial costs of your training programs
- (2) The available finances and structure of the training budget
- (3) The benefits of training to the organization and its employees

1. costs

Armstrong (1988) noted that the basic costs for training are: remuneration and expenses of trainers and trainees; preparation and maintenance of training programs; training materials, equipment, and premises; lower performance of trainees until fully trained.

These costs can be broken down into seven specific cost areas to be considered in your training plan:

- (1) Salaries, wages and expenses of trainers
- (2) Trainee expenses (eg travel costs, meals and accommodation)
- (3) Costs to prepare training programs
- (4) Support and upkeep of training programs
- (5) Cost of training materials, equipment and premises
- (6) Training of trainers to improve their knowledge, skill and job performance
- (7) Financial losses to the company due to continuing inadequate employee performance.

If we have to save money, e-training or online training is cheaper than traditional training or classroom training. For example, in salespeople training, Jacksonville, Fla.-based PSS/World Medical is renowned for its sales training, especially in its PSS medical supplies business unit, which employs 700 of the company's roughly 1,000 salespeople. Until early last year, almost all of the company's training was instructor-led or done on the job, but a review of how and where training dollars were spent prompted the addition of an online learning component. "We found that about 80 percent was being spent during the salesperson's first year within the company," says Susan Parker, director of career development, Center for Career Development, PSS/World Medical. "Since a 25 percent turnover is normal with straight-commission salespeople, we started questioning how we could get more value for our training dollars by spreading them out over the salesperson's career." (Ellis, 2002:34)

The result was CCD Online, a Web site that incorporates training resources with other employee-related information. Parker remains selective in determining which curricula are suitable for online delivery. A course on blood-borne pathogens, for example, is well suited to e-learning. Every PSS rep is required to take the course to learn safety procedures to follow when calling on physician offices and labs. Employee orientation also is now online. In the past, the company flew new hires into Jacksonville every month or two for four days of training. Now, new salespeople receive the same information during their first day on the job by spending a few hours online. "That was a big decision for us given our culture. But by putting it online we're able to use those training dollars later in the salesperson's career," Parker says, adding that more leadership training for seasoned salespeople is one way the company is spreading out those dollars (Ellis, 2002:35).

2. Benefits

The benefits of training can be plotted in terms of benefits for employees and benefits for the organization (Stout, 1993:54).

Individual benefits:

- (1) More job satisfaction
- (2) Improved job performance
- (3) Better career prospects
- (4) Greater salary expectations

Organization benefits:

- (1) Improves work performance
- (2) Increases safety at work
- (3) Reinforces staff motivation
- (4) More consistent customer satisfaction

Conclusions

In this paper we identified the training plan as a practical document which details the tactics used to design and implement training with the use of knowledge management.

The training plan outlines what training programs and methods can be used to meet organizational and individual training needs, as it combines with knowledge management. But it is not so easy.

KM doesn't convey that organizations need to do more than just manage knowledge. They need to create environments that are conducive to knowledge management. The environments includes: (1)knowledge ecology, (2)knowledge sharing, (3)building a knowledge system or culture, and (4)learning culture (Sindell, 2001:21).

Knowledge ecology means studying the flows of knowledge and information within an organization, including examining the knowledge ecology, problems in "knowledge land", reengineering knowledge flow, and merging parallel flows (Horton, 2002).

The analysis of knowledge ecology includes (1)identifying people whose actions matter, (2)analyzing what roles they play, (3)analyzing what prompts and informs their actions, (4)analyzing how knowledge is transmitted, (5)analyzing who initiates the transfer, (6)analyzing how all this should really happen (Horton, 2002). If training planner builds an appropriate knowledge ecology, then a good knowledge system or culture will be established and there will be a culture of knowledge sharing in the organization.

1. Build appropriate knowledge ecology

Followings are some suggestions to help training planner implement knowledge management seamlessly into training plan (Sindell, 2001:21):

(1) Identify goals and barriers

Identify the overall goals of KM initiative and the smaller goals that build up to larger objectives. Also identify potential change obstacles, which may include lack of leadership support, not communicating a compelling need for KM, and elements within the organization's culture.

(2) Consider KM as a competency.

Individuals and organizations need to identify the technical and sociological aspects of KM. They can do this by first identifying what tools and processes are already in place and then defining the gaps that need to be addressed. Part of developing KM as a competency is defining the appropriate language or terminology planner need to use to inspire collaboration.

(3) Create an environment that encourages knowledge sharing

Do this with formal processes, such as creating a compensation structure that measures and rewards how much employees share and collaborate. Encourage knowledge sharing through informal processes by developing communities of practice in which the members share what they know about a specific discipline.

(4) Use existing communication structures

Don't reinvent the wheel. Use what's already in place (email, intranet, and other online collaboration technology) to reinforce the KM component and the practice of cross-functional work teams. KM becomes a part of team meetings when you request individual project updates and require input from team members. Once a month, initiate casual learning forums and cover a different topic each month.

2. Make efficient knowledge performance

Organizations that complement nimble processes of training plan with equally efficient knowledge management in training commonly employ four key strategies: early involvement, a conducive organizational structure, innovative knowledge delivery and breadth of content (Krell, 2001:42).

(1) Early Involvement

The Earlier using knowledge management for training plan, the better. At Konica, Gillin's education group works closely with the product development group. "We're actually getting our hands on the new products while they're still in the early development stages," he says. Strategic Alignment Group's Meyer worked with a start-up optical-switch manufacturer that used its service organization to test the company's products. "They were back-stopped by the engineers," says Meyer. "But the notion is what better way to train the service guys." (Krell, 2001:42)

(2) A Conducive Organizational Structure

Training teams and product (service) development teams should keep closed with each other. Organizational structure plays an important role in the alignment of knowledge delivery with new-product delivery. Deloitte Consulting, for example, is organized along service lines such as audit/tax and competency groups like change management or ERP (enterprise resource planning) systems, which are supported by training and knowledge management people within the same specialties.

Kabakov's training channel programs at Microsoft work very closely with the product development teams because both groups are part of the same organization

within the company and report to the same vice president (Krell, 2001:42).

(3) Innovative Knowledge Delivery

Organizations that successfully align product (service) and knowledge cycles use a variety of delivery mechanisms—classroom training, online learning, knowledge management portals, computer-based training and even webcasts—to inform and educate the workforce. “We couldn’t do it without the Internet,” is the standard refrain among training, sales, marketing and customer service executives when explaining how they keep their oftentimes global workforces up to speed (Krell, 2001:43).

(4) Breadth of Content

In addition to finding new ways to deliver training plan to employees in response to training performance, Network Telephone also has expanded its training content. “We really work to equip our sales reps with an understanding of our competitors and how our product can be positioned against the competition’s,” says Tony Atchley, Network’s vice president of sales (Krell, 2001:43).

CDW, meanwhile, expanded its sales training program from a one-week, single-phase program to an entire college within CDW University in an effort to keep staff updated on new product offerings, explains Maria Sullivan, vice president of sales training. CDW’s College of Sales offers courses and certifications in specific manufacturer’s product lines as well as computing processes such as networking.

In short, regardless of planners’ favor, the present enthusiasm for knowledge management is rooted in computer networks. This, obviously, is because of the new opportunities they offer not just for storing and codifying information but for allowing people to **communicate more easily** regardless of where they work. Because KM efforts depend so heavily on computer systems, they often are controlled, or influenced to a great degree, by computer experts, the people in the organization’s information-technology (IT) department (Gordon, 1999).

But while knowledge management operates via computer systems, it isn’t about computers-and it can be if it is to be effective. It has to be about **learning**. More than that, it has to be about learning that is directly useful on the training plan, learning that enables better performance (Gordon, 1999).

At its heart, KM isn’t about technology, it’s about culture. And unless people with some insight into human behavior get involved, it isn’t going to work (Gordon, 1999).

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