

eLearning and Knowledge Management, Symptoms of a Reality

Prasit Teekaput and Pairoj Waiwanijchakij

Department of Electrical Engineering
Chulalongkorn University
Thailand

Prasit.T@chula.ac.th, Pairoj.W@student.chula.ac.th

Abstract

A growing number of companies and organizations are developing a new learning culture, since they realize that learning faster than competitors is the only competitive advantage which is viable. Those who learn faster will be capable of renewing their products and provide services faster. They will have the advantage in the current competitive market. However, getting an organization's learning capacity to gain momentum is not that easy. It is not just a question of installing a new learning or Knowledge Management technologies; it requires a transformation that will impact the whole organization.

This paper offers some thoughts on the essence of learning organizations and how eLearning and Knowledge Management can help them to become a learning organization.

1. Introduction

1.1 The conception and birth of a new economy

All over the world motivated people are developing their competencies by using information as building material. Their brain is a never-ending construction site where old knowledge, skills and attitudes are replaced by new paradigms. These paradigms make it easier for them to conceive new products and services, some of which, backed by investors

who believe in them, find their way to the market. These new products and services feed the market with new information. Then the cycle restarts. This circle of innovation is a natural process in learning organizations.

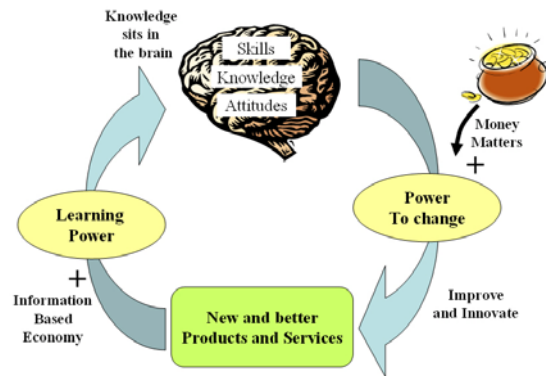


Figure 1 The circle of innovation

It is not difficult to understand that this process is responsible for an exponential growth of information. Take the rapid deployment of information technology and worldwide telecommunication infrastructures into account, and the organization can imagine that the process depicted in figure 1 is speeding up. If an organization or an individual, can not increase their learning power (i.e. development of new skills, knowledge and attitudes), or their power to change (i.e. use resources to transform the business processes based on what is learned), then the organization will have to leave the market. It is therefore imperative to become a learning organization.

1.2 The new global reality

The new global reality is based on the existence of a new, “fifth element”: information. Besides the four earthly elements: water, air, fire and earth, we now have a fifth element. This element is not produced by our earth, but by us, the human resources. Without us, information would not exist the way it exists. We, the learners and the innovators among us, are creating a new global reality based on information.

The entire economy and society will henceforth be influenced by this new element. It is the driving element of the circle of information. This will, no doubt, have significant consequences for our manner of learning, using, accumulating, generating and exchanging knowledge. We have to adapt to this new environment which demands much from people, many of whom still regard information as a threat. It is not a threat; it is here to stay and we have to adapt ourselves to this new situation.

The exponential growth of information has an enormous impact on at least two kinds of organizations.

- The first kind is the *educational institute*. It is no longer possible to adapt our standard classroom courses to keep up with the information and the new knowledge that are becoming available. Classroom teaching can not keep up with reality. We have to look differently at the role of the educational system of a dramatically changing society. The first priority is no longer to fill students’ brains with knowledge, but to teach students “how to breathe information”. Without this skill it is going to be impossible to survive in an ever-changing world. To achieve this transformation, teachers have to embrace the new society and look

for a new role for educational institute. Without this commitment the educational system will lose its driving force in the new global reality.

- The second kind is all *companies* competing with one another in the free market economy. For them information and the processing of information (learning) represent only way to survive in the global reality. If management does not succeed in developing a new management style that promotes learning and competence development, then organizations will cease to exist. It is this certainty that causes much of the stress in organizations. The road to this new culture is not simple and will demand much self-sacrifice from many managers.

2. Learning power

Learning power is a person’s capacity to capture and use information in an effort to develop new skills, knowledge and attitudes. Without sufficient power, people are not able to adapt swiftly enough to what is happening in the world. Without this power the circle of information is fiction.

The *learning tension* is almost a physical tension in our brains. The stronger the tension, the larger the hunger of information. People in the right roles develop a high learning tension. Then information does not have to be pushed towards employees, because employees are motivated enough to pull the appropriate information from the information flow.

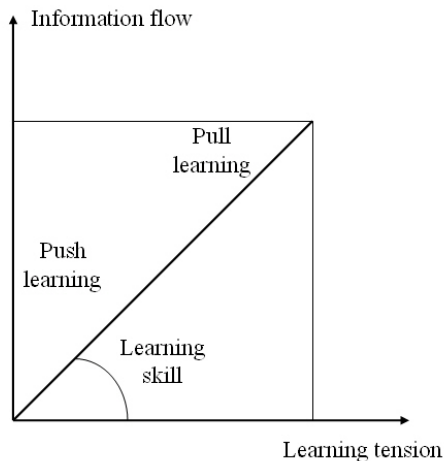


Figure 2 The learning power

The *learning skill* is represented by the angle in the figure 2. People have a large learning skill if they are able to find information in the information flow. This means, for instance, that people know how to use a search engine on the Internet, that they are able to participate in online Communities, that they have excellent social skills (i.e. assertiveness) and are able to work as a team member. If they do not develop their learning skills they may have a high learning tension, but they will not be able to find the right information and their learning power will be small.

At first glance it appears as if this challenge, enlargement of the learning power, will be too difficult for many of people. This way of thinking – this paradigm – is a result of the schooling we received. We subsequently regard learning as something imposed on us: A teacher explains, pushes information towards us, and an exam follows to check if the knowledge has been captured. This mental model of how learning occurs is no longer appropriate in the New Economy.

People will only plug into the information flow if they are motivated to learn, in other words, if they have a job or a role in an organization that they like. Without this intrinsic motivation, or learning tension, people will not learn swiftly enough

to keep up with change. We could even go as far as to say that the “treatment” of the human resources in an organization will determine the speed at which that organization learns and changes. This new people management will be the most important incentive for learning organizations.

To capture all this is a law, we can determine the learning power as the product of learning tension multiplied by the amount of information somebody uses to develop his competencies

Learning Power = Learning Tension x Information Flow

This analogy is based on the basic law of electricity where the electrical power equals the electrical tension multiplied by the electrical current.

If the organization does not want people to learn, remember the following statements

- People do not learn if the organization place them in the wrong role, or if the organization do not give them access to information (learning tension = low, possible information = low). People with professional ambitions will move to another organization or team if the organization can not offer them challenging jobs and learning opportunities. People without ambitions will stay.
- People will not learn if the organization put them in the wrong role, although the organization give them access to all information the organization have (learning tension = low, possible information flow = high). This statement is very important, because in this case investments, in for instance eLearning and Knowledge

Management, will not result in higher learning power. Communities of Practice will be initiated, but will not last because they miss intrinsic motivation.

- People will not learn if the organization put them in the right role, but do not give them access to information (learning tension = high, possible information flow = low), such as refusing them access to the Internet, or do not invest in eLearning systems or Knowledge Management. It is very possible that an organization will lose these driven people, because they will look for another environment in which they can grow.

It is therefore very important to realize that eLearning and Knowledge Management or sharing will only happen in an organization where people can migrate to challenging roles in which they can give the best of themselves, and where managers know how to motivate and mobilize people for the achievement of compelling visions and strategies. eLearning and Knowledge Management are systems that will only be used by highly motivated employees. These systems are pull-learning systems. The organization can not introduce knowledge management and eLearning systems without changing the whole culture of the organization itself. eLearning and knowledge sharing are symptoms of learning organizations; they do not make learning organizations, they support them.

3. Three steps towards eLearning and knowledge sharing

All that is missing from figure 3, is the importance of the three steps. Miss one and fail. This is true for many organizations that have failed in their change project.

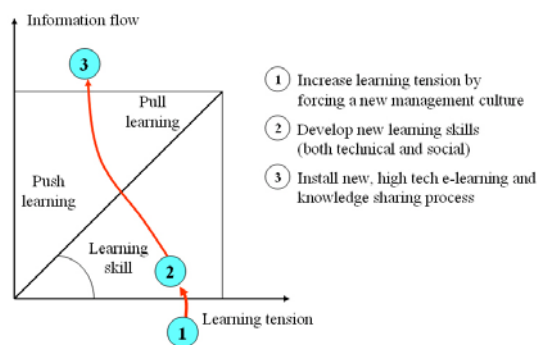


Figure 3 Three steps for achieving eLearning and knowledge sharing

The first step, changing the management culture, is the most difficult step to take. Once this step has been taken the other two will follow spontaneously. eLearning systems will be installed and Knowledge Management or sharing will be occurred, because technology is really not the issue. Most of the systems can be bought or developed, and the skills needed to use these systems will be developed / trained while people use them.

4. “AAA Learning” strategy

AAA-learning strategy; Awakening, Absorption, and Action, as depicted in figure 4, has been the driver towards the application selection. AAA-learning combines training (classroom), eLearning and knowledge sharing by means of Communities of Practice. Keeping this concept, it was clear that systems or software currently available on the market are not always suitable for the learning model of the future. Learning, coaching, content creation etc. can no longer be centralized, the *networking* and *sharing* of knowledge are going to be the answer to tomorrow’s competence development.

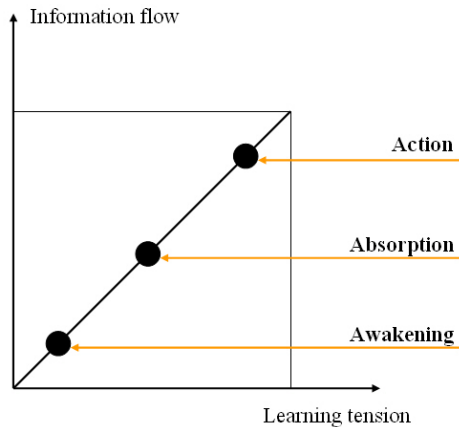


Figure 4 AAA Learning

4.1 Awakening

If the learning tension is low, people will only learn in a classroom environment. Information has to be pushed towards the learner. This method of learning is still acceptable, but in this paper's concept it will be used to awaken people. This learning behavior alone does not enable one to keep up with the New Economy

4.2 Absorption

If the learning tension increases, people's learning behavior will change dramatically. They will not only learn through classroom training, but they will start using other learning systems. It is this phase that eLearning, or web-based learning will start occurring.

4.3 Action

Action learning is the learning behavior seen in people with a very high learning tension. They will start participating in Communities of Practice where they will share, for instance, best practices, not because they have to, but because they understand that if they really want to become an expert they have to share information and knowledge with others. This is the "GATA"

age. An age where people "Give Away" and "Take Away" information to develop their competencies.

4.4 Blended learning

A typical learning trajectory could look like this: people are invited to awakening sessions. During these, standard classroom events, a coach or trainer gives sufficient information and knowledge to awaken these people. They have to become consciously aware of their own incompetence. If their learning tension increases (they have the right role in organization), a different learning behavior develops. They will be much more motivated to learn via the web, go through eLearning packages (read a book), or attend a more intensive classroom event. During this phase they absorb a lot of information, and this phase is therefore also called the absorption phase. Really driven people do not stop their learning process. They are still motivated to develop their competencies that they start with action learning. During this phase they start with knowledge sharing in Communities of Practice.

This learning process, in which different learning environments are used, is called blended learning. With AAA learning we look at learning, or competence development from a holistic point of view, the different parts are not important but we should focus on the whole process.

It is very important for an organization to reengineer its learning process so that people with different learning tensions can learn in different learning processes.

4.5 Communities of Practice

Communities of Practice (CoP) is a flexible group of professionals, informally bound by a class of common interests, and the pursuit of common solutions, and thereby embodying a store of common knowledge.

The main purpose of a CoP is the exchange of knowledge between its members.

During this process different players are active in a process of knowledge sharing. In the AAA learning strategy this supports the action learning process.

5. Conclusion

It is important to realize that eLearning and Knowledge Management will dramatically change the face of learning. This will not be the case for everybody, but most certainly for those who work or live in a challenging environment that stimulates the development of new skills, knowledge and attitudes. The impact of eLearning and Knowledge Management or knowledge sharing will have on the learning power of individuals and organizations that take part in this new global economy and not on those who do not.

6. References

1. Pascale, R.T. (1999), "Surfing at the Edge of Chaos", *Sloan Management Review*, Spring 83-94.
2. Anderson P., "Seven Levers for Guiding the Evolving Enterprise", in Clippinger, J.H. (Editor) (1999), *The Biology of Business*, San Francisco: Jossey-Bass Publishers, 113-152.
3. Eisenhardt, K.M. and Sull, D.N. (2001), "Strategy as Simple Rules", *Harvard Business Review*, January 111.
4. Eisenhardt, K.M. and Brown, S.L. (1998), *Competing on the Edge: Strategy as Structured Chaos*, Boston: Harvard Business School Press.
5. David Snowden, (2002). "Complex Acts of Knowing: Paradox and Descriptive Self-awareness". *Journal of Knowledge Management*, Vol 6/2
6. Baumard P. (1999). *Tacit Knowledge in organization*. SAGE: London
7. Von Krogh, G. Ichijo K. Nonaka, I, (2000). *Enabling Knowledge Creation*. Oxford University Press: Oxford
8. Mittleton-Kelly E. (2001): *Complex Systems and Evolutionary Perspectives of Organizations – The Application of Complexity Theory to Organizations*. Elsevier City