Online Community of Corporate Learning

-Company Mergers

“Mergers likens to an iceberg. The tip is made up of the sorts of financial goals and organizational structures that always get top billing. But the things below the surface, such as how workers communicate and what words they use, are just as important.”
- Susan Bowick, HP’s senior VP of HRM

Introduction

When two companies merge into one company, the new organization has to integrate their business processes as well as corporate cultures. The process of integration is costly in time and human resources. Tangible goals are often to minimize the loss of productivity, and to revamp the structure of the organization. A positive atmosphere is also salient to the productivity and financial goals of the new merged company.

Today, many companies are described as having knowledge as their core competence. These Knowledge Intensive Firms (KIF) are often characterized by organizing knowledge, knowing, and knowledge networks. This type of work is “symbolic analytic”, and the role of the knowledge workers is to apply knowledge to prior existing knowledge (Drucker 1993). Currently managing companies’ knowledge assets is important for the success of KIFs. Knowledge Management tools can be useful in this work. In the following article, we argue that the process of companies’ merging can be described as an organizational learning process.

1 “Knowledge Management is an integrated, systematic approach to identifying, managing, and sharing all of an enterprise’s information assets, including databases, documents, policies, and procedures, as well as previously unarticulated expertise and experience held by individual workers.” Definition of knowledge management from a 1999 U.S. Army report, highlighted by The Conference Board.
For mergers to succeed, companies need to learn about corporate cultures and develop common ground. In cases where a merger includes companies from several countries, employees will need to understand others’ cultural backgrounds. They also need to learn new languages in different business practices throughout the new company. It is important to facilitate building relationships and bridging gaps between their cultures. An Online Learning Community (OLC) can be a useful tool in the merger process.

OLC emphasize that learning is the goal of the activity, and that learning take place within a community of people. Since this paper addresses OLCs in corporate settings, the conceptual discussion is based on the theories of organizational learning, situated learning, communities of practice, and activity theory. With this conceptual framework we view merger as an Organizational Learning Cycle, focusing on the corporate culture as a collective activity. In this paper we describe the characteristics of our online community, and discuss important tools in our proposed design. Identifying connections or gaps between the companies is basis for design of our Online Community of Corporate Learning. The tools are Peer Learning, Career Guidance, Visual Representation, Evangelists, Community Events, and Informal Discussion.

Conceptual framework

The Computer Supported Collaborative Learning (CSCL) tradition focuses on the use of Information and Communication Technology (ICT) - tools to facilitate the creation of new knowledge in the interaction of different actors. Following Koschmann (1996), the CSCL is one of four traditions within the research on learning with technology. CSCL view learning
as an interactive process, and Koschmann (1996) emphasize “...how learning is reflected in the language of learners, how social factors affect the learning processes and how Information and Communication Technology (ICT) actually is used in the learning processes”.

CSCL conflicts with underlying cognitive theories in learning that earlier traditions on learning with technology are grounded in. Earlier traditions are often based on Domain or Learner Centred Design and the transmission of knowledge and learning as a non-social activity. Gifford & Enyedy (1999) suggest Activity Centred Design (ACD) as an alternative perspective. ACD views learning as a complex process in which material setting and social participation are important in cognitive development. This perspective also emphasizes interactivity as a driving force in learning.

Online Learning Community

Online Learning can be defined as a number of physical learning environments (individuals, groups, classrooms, companies, etc) connected virtually. Technology is a necessary condition for learning across these environments (Venkatraman & Henderson 1998). OLCs open new avenues for interaction across geographically distributed companies, and allowing the inclusion of more people in value networks. In addition, the quantity and quality of collaboration and learning may be strengthened, and the exchange and absorption of information will occur more quickly. People building relationships around the same learning activity, can be identified as a Community of learners. Learning is still a cognitive development in individuals; however, their participation in and interactions through Online Communities facilitate collective learning.

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metaphor “computer-as-pupils”, and is a representation of Piaget’s theory of stages. CSCL is the fourth perspective on learning and technology.

\(^3\) Activity Centred Design is build upon insight on Distributed Cognition and Activity Theory.
Perspective on Learning

Learning can be described as both a product and a process (Argyris & Schön 1996). For learning to be considered as a product, an expert in the field of interest must already know the answer. On the path to reach an answer, the first step is to identify the person(s) that possess this knowledge. The next step is to apply this knowledge to a particular application. This is often called a limited understanding of learning, because in most cases the answer is not known beforehand (Dixon 1994). The transfer of the exact same knowledge is also a difficult task, as knowledge is an individual interpretation of the information received. In contrast, Dixon (1994) claims that the result of learning can be enhanced understanding of some issue.

Learning involves negotiation of meaning, and takes place in a developmental process of cognition and skills. From this perspective, because of its dynamic and changing nature, both learning and knowledge are viewed a continuous process (Lave & Wenger 1991). Learning theories have gradually moved from learning outcomes to learning process. The potential for change in behaviour is now seen as the core tool for development and innovation in organizations. Learning takes place in specific situations in which the contextual factors are important mediators for the organizational development.

Situated Learning (Lave & Wenger, 1991) is a theory that considers learners as active participants in practice. The theory emphasizes the development of the whole person rather than a person just receiving factual knowledge about the world. They also argue that the transparency of a learning context cannot depend only on the features of the context, but also on the preparedness and flexibility of the learner. The generality of any form of knowledge always lies in the power to renegotiate the meaning of the past and future in constructing the meaning in present circumstances. In Lave & Wengers’ view, learning is not merely situated in practice; rather it is an integral part of generative social practice in the lived-in world.
In the theory of situated learning, “Legitimate Peripheral Participation” (Lave & Wenger, 1991) concerns the process by which newcomers become a part of community of practice. The feeling of belonging is not just an underpinning of learning, but also an important part of the learning process itself. The novice can gradually move from legitimate peripheral participation to full participation by taking part in the activities. Appropriation takes place through situated negotiations and renegotiations of meaning in the world. Understanding and experience are in constant interaction, as well as mutually constitutive. Persons, actions and the world are implicated in thoughts and speech. This implies that the possibilities of learning are enabled by a system of relations. Lave & Wenger (1991) argue that learning involves the construction of identities.

With respect to the learning concept, Wenger (1998) states that there is a major difference between the learning that takes place outside of practice, and the learning that takes place within the practice. Communities of practice then become the resources for learning in organizations, as well as the contexts in which learning is manifested through an identity of participation.

Community of learners

In community of learners, both newcomers and more mature members are conceived as active (Rogoff, 1994). She also claims that no role is by definition passive, and no role has responsibility for knowing or directing. However, in community of learners in corporate setting, especially in mergers, the directivity of the learning is essential. The concept of community is addressed in both Activity Theory and in the theories on Community of Practice. However, the two theories have somewhat different definitions of community. These two theories are often represented by Wenger’s Community of Practice (CoP) and Engeström’s Activity System (AS). At first glance, both theories seem to be static, but the units or activities they try to illustrate are continuously changing.
Wenger (1998) defines practice as an essential source of coherence in a community, and describes three dimensions of practice: joint enterprise, mutual engagement, and shared repertoire. In a community of learners, a collective process of negotiation results in a joint enterprise. This process reflects on the full complexity of mutual engagement, which is defined by the participants in the process of pursuing it. The repertoire is a part of the community’s practice, that includes shared routines, words and physical tools, ways of doing things, stories, gestures, symbols, and actions or concepts. The community has produced or adopted this shared repertoire during its existence.

An AS may be a relevant framework when networking and collaboration across company boundaries is the purpose of analysis. The AS comprises a number of triadic relations: subject, artefacts, goal (object), rules, community, and division of labour. All these factors have a mutual effect on each other, and in the complete activity system we also find lines connecting elements across the different triangles. The subject is a steering factor for the other elements in the activity system, and its activity includes the relation subject - object, artefacts and result. The object is referring to the subject’s goal or motive with the activity, and the direction for the activity.

Activity Theory (Engeström, 1987) is also distinguishing between collective activity and individual action. Engeström has adopted a three level model of activity first described by Leont’ev (1981):

<table>
<thead>
<tr>
<th>Activity</th>
<th>Action</th>
<th>Operation</th>
</tr>
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<tr>
<td>→ Object-related motive</td>
<td>→ Short-term goal</td>
<td>→ Concrete conditions</td>
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On the basis of learning as a collective activity, Engeström (1987) has included contextual factors as community, rules and division of labour in the activity system. The context must be described in relation to the activity of the subject. Community represents the persons who share the same goals. Rules refer to the norms and conventions that

4 See for example Engeström (1987, 1999b), and also figure 2 p.12
control actions within the activity, both implicit and explicit. Division of labour refers to the number of goal-oriented actions that are carried out by the members in the community as a result of horizontal division of tasks and vertical division of power and status.

CoP emphasizes learning and knowing in a natural context, and AS focuses on potential for change and transformation. Both theories are concerned with the ties between people in relation to daily work. While CoP addresses common practice as the core idea, AS emphasizes more the relations to external networks. The AS can be taken as the unit of analysis, and give direction, meaning and context to different individual events. Both the history and future may be included when using AS in the analysis and the culture is also strongly emphasized. CoP does not seem to address the direction of the analysis, but focus more on the joint enterprise and renegotiate the meaning of the past and future. The goal in CoP is then more person-based than AS’s productivity oriented aspect. AS also seem to limit the community to include people having a common goal. An organization or CoP can be illustrated by use of an AS, and emphasize the importance of having a common learning goal.

In Online Learning Communities in corporations, collaborative learning is then underlined as goal of the activity. According to Pea (1996), not all computer learning is experienced as collaborative. He claims that collective learning may be truer to the experiences. Our OLC draw on ideas from both AT and Cop, and emphasize employee’s learning of a new culture and knowledge as the goal of participating in different activities. In these learning activities, online communication and interaction among employees are important tools. The direction in merger is to develop a new common corporate culture, and our OLC can support this collective learning process. With this focus on learning and community we will now argue that merger situations can be described as an organizational learning process.
Merger process as Organizational Learning

Organizations often face novel challenges when involved in a merger. For companies to be able to meet with challenges they must realize there are several ways to reach one goal. They must also ensure that the individuals responsible for solving these problems have the ability to develop the required knowledge. In mergers, the situation is often very turbulent for the companies involved, thus competence as well as context is important to facilitate learning in the organization.

Theories of organizational learning can be adopted to examine the merger process. Not only is it important to exchange high-value knowledge, companies must also realize that this implies creation of new knowledge through the convergence of prior knowledge. To facilitate exchange of knowledge between the companies, channels for communication are necessary. Good internal communication is also the developmental foundation of common ground across the companies. The goal is to integrate the two companies to enable them to perform in concert. This can be described as an organizational learning cycle or collective activity.

Figure 1: Organizational Learning Cycle

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5 Inspired by Nixon’s Organizational Learning Cycle (Nixon, 1994) and Wenger’s (1998) “Boundary Objects”.
Creation and sharing of knowledge

An important goal in a merger is to develop an arena for sharing knowledge. However, most people need a motive to spend time doing this. Knowing and learning are important parts of individuals joining CoPs. Knowledge also has a collective and distributed character. In addition, Nonaka & Takeuchi (1995) argue that knowledge can be described as having both explicit and implicit dimensions.

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<thead>
<tr>
<th></th>
<th>Individual knowledge</th>
<th>Collective knowledge</th>
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<tbody>
<tr>
<td>Explicit knowledge</td>
<td><em>Embrained and encoded in</em></td>
<td><em>Encoded in</em></td>
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<tr>
<td></td>
<td>- articulated mental models</td>
<td>- formalized routines, methods and concepts</td>
</tr>
<tr>
<td></td>
<td>- personal theories of action</td>
<td>- standardized operations, local language</td>
</tr>
<tr>
<td>Tacit knowledge</td>
<td><em>Embrained in</em></td>
<td><em>Encultured in</em></td>
</tr>
<tr>
<td></td>
<td>- tacit mental models</td>
<td>- narratives/stories, rituals, heroes</td>
</tr>
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<td></td>
<td>- hunches and intuition</td>
<td>- values and norms</td>
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<td></td>
<td><em>Embodied in</em></td>
<td><em>Embedded in</em></td>
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<td></td>
<td>- motoric skills</td>
<td>- organizational practice</td>
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<td>- neurophysiologic chunks</td>
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The transfer of tacit knowledge requires people to interact with each other during their daily work activities. Informal interaction involving dialogue about work practice can facilitate the sharing of tacit knowledge. Such interactions can consist of artefacts that enhance common understanding of the practice. We argue that the use of an OLC can be a mediating artefact in development of a common ground and sharing of knowledge between the merging companies.

**Communication**

Good internal communication is the basis for the development of understanding between companies. On the other hand, communication is more likely to be understood as intended if common ground or mutual knowledge exists. Hargie & Tourish (2003) argue that organizational success or failure often hinges on internal communication. However, having communication channels are not always enough. Open and fast communication is also important in our changing Knowledge society.

The received information also needs to be clearly understood in the right way. However, the existence of channels for communication does not always indicate that knowledge will be shared; options for interaction are also necessary. This collaboration can be organized as different learning activities in an online community. These learning activities in the OLC are most efficient if they are connected to the business strategy. Communication is also closely bound to culture.

Development of common culture as well as collective knowledge is heavily based on adequate communication between the diversity of people and different levels in the companies. An OLC can help these people learn about each other’s corporate culture and exchange of knowledge and this require communication channels across the companies. The OLC can be structured around boundary objects such as artefacts, documents and concepts that is important in the new company. A common culture is based on people sharing mental models or having a common ground.
Common Ground

In this learning, the construction of identity also relates to the integration of the organizational culture. In merger situations, the individuals have to learn to become a member of a new community. The feeling of belonging to this new community and being an “insider” is essential for the individuals in the company (Lave & Wenger, 1991).

A corporate culture can be defined as “the way we do things around here”. This is based on tacit social knowledge and encultured in organizational practice. Schein (1997) argues that integration of culture can take place through learning in different work practice. To develop a common ground, it is important to acquire knowledge about work practice. Learning about others’ practice is often based on understanding of the language of practice. Participation in specific practical situations can help employees develop a common ground. Common ground is based on good internal communication, and is also a prerequisite for development of new corporate culture.

Collective Activity

Activity System is a useful framework for describing interaction between actors in and across structural units. When two companies, illustrated as Activity Systems in the figure below, are in a merger situation, their goals are changing (Object 1 → Object 2) as a result of the interaction. Their goals can then become potentially shared and constructed. The ideal solution is to develop a collectively created goal (Object 3). In the case of mergers, the development of common ground between the two companies is often the most important goal.
For companies to move in a collective direction in the merger process, they need to be in a “Zone of Proximal Development”. Vygotsky (1978) describes the Zone of Proximal Development as the functions that” will mature tomorrow but are currently in an embryonic state”. These functions have potential to become an Expansive Learning Cycle (Engeström 1999), and represent the collective activity of becoming one new company.

It is important to examine where the cultures connect, and where there are gaps. In this process,”boundary objects” can be helpful to build relations across the organizations. Wenger (1998 s.105) describe “boundary objects” as artefacts, documents, concepts, and other forms of reification around which “communities of practice” can organize their interconnections.

By the use of “boundary objects” it is possible to create knots between different activities that usually are not connected (Engeström, Engeström & Vähäaho 1999). Identified “boundary objects” can be used as a starting point when designing an OLC. Also, many forms of connections can enhance “boundary objects”: shared projects across the companies or people who can act as “knowledge brokers” (Wenger, McDermott & Snyder, 2002). We assume that an OLC can function as a “boundary object” between the companies in the merger. In doing this, it may be helpful to focus on learning activities, not merely boundaries of organizational units.
Learning Design

Based on the learning problems we discovered in our examination of corporate case studies and reading discussions, we now propose a design of an OLC for corporate learning. This includes a framework describing the characteristics and tools necessary for the successful development of an online community for learning activities in early stage of company mergers.

Figure 3: Characteristics included in the proposed design

Merger Information
The Merger Site holds updated information about the ongoing merger. This includes information about the current status in the process and what is new. It is mainly a communication channel for Managers or CEO to make the new business strategy explicit to the employees. It will function as a voice for the new corporate values.

**Problem: Lack of information**

Lack of information between employees and managers is a common problem in most companies (Hargie & Tourish, 2003). Merger situations are often a very turbulent process, with communication processes being one of the most challenging aspects. In the HP - Compaq merger the company used a “Communication Toolkit” to support the ongoing communication processes.

In mergers, it is important to provide clear and updated information about the process. Consistency between internal and external information is crucial to avoid employees engaging in gossip. Good internal communication keeps employees focused on their jobs and facilitates a positive atmosphere in the workplace. If the merger process is time-consuming and there is a lack of information, employees may become disenfranchised. Open and fast flow of information is also a source to trust among employees (Hargie & Tourish, 2003). High level of trust throughout the company is often necessary to succeed in merger processes.

**Existing Community**

Tapped In - [http://www.tappedin.com](http://www.tappedin.com)

As quoted from their website: “TAPPED IN™ is the online workplace of an international community of education professionals. K-12 teachers and librarians, professional development staff, teacher education faculty and students, and researchers engage in professional development programs and informal collaborative activities with colleagues.”
We borrow two salient features from the Tapped In community for our OLC, its virtual world interface and flexible toolbox design. The interface is based on the MOO or multi-user virtual worlds interface originally designed at Xerox Park. The virtual community of Tapped In has offices, conference rooms, and community areas. It provides the users with their own virtual office where they can store documents and post notices, and allows them to have a presence in the community even if they are not on-line. The users also have a wide range of tools at their disposal including whiteboards, chat, e-mail, and application sharing. The community doesn’t structure the use of these tools but instead allows the users the freedom to experiment and find what works best for them.

The Solution

In our Merger Site information is based on vertical interaction between employees and managers. The Merger Site is mostly one-way information, but can also be expanded to include more interactive activities using a flexible toolbox. One example is use of eLearning tools related to the business strategy that force employees to take a test to see if information received is read and also understood. Games or simulations can help people internalize the new values and effect the proposed change. Employees can also use this site to ask questions about the process, these should be organized and filtered before made available to others using the site. This could function like a FAQ in the merger process to save time and resources answering the same questions.

The Merger Site will be the entrance of the OLC, and the space metaphor will be represented in the different part of our OLC. In the following sections we discuss the need for each characteristic or tool, illustrate how it is successfully implemented in other communities, and suggest a design and implementation for the tool within an OLC for companies merging.

Learning from peers
Communication can fail simply because cultural differences stand in the way of the message. In the first period of a merger, the challenge is often to learn other languages. This includes both acquisition of a national language and language of practice. Learning a second language is necessary if the new company has locations in different countries and requires collaboration across nations.

**Problem: Developing common language skills**

One of the formidable challenges inherent to the Age-Nouvelle Merger was the need for employees to develop second-language skills in order to adequately communicate in both French and English. Although most of the employees from Age and Nouvelle did have some experience and understanding of both French and English, the level of fluency needed for effective meetings was far from what was achieved. Many of the employees interviewed for the case study described the meetings as slow and laborious process, in which they frequently had to resort to drawing diagrams.

In the CuttingEdge - OldSchool merger, developing common language skills was also a problem; in this situation it was a computer-programming language that needed to be learned. CuttingEdge software was developed in Java, while OldSchool developed their product in an archaic language called Spires. Although the new product would be written in Java, during development, programmers would have to understand exiting code written in both languages. This proved a bigger undertaking than was expected and delayed the new product release for two years.

Although there are some obvious differences between natural language acquisition and computer programming language acquisition, we will attempt to address both issues under the framework of peer learning. In constructing our solution we borrowed features and functionality from the following communities.

**Existing Communities**
MyLanguageExchange - [http://www.mylanguaageexchange.com](http://www.mylanguaageexchange.com)

An online community focused on second language acquisition through group and partner interaction. The community claims to have thousands of members from over 121 countries. Three main tools are used in the community; Text chat, voice/text chat, and email.

Members can participate with one other person or in a group. The idea is that you choose people that are fluent in the language you want to learn and then take turns communicating in and practicing each language.

The community has put considerable effort into scaffolding participation between users. Each user has a profile listing their native language and the language they are trying to learn. The community provides a structured plan for participation that takes each user through the steps that they will need to follow to participate. It also provides lesson plans that can be used to guide users during learning sessions.


As quoted from their website. “vbCity is a community of VB and .NET developers joined together with a common goal: to learn, teach, and have fun programming. Developers from all over the world come together to share knowledge, source code, and tutorials for free to help their fellow programmers”.

This community provides a robust site that can be used by novices and expert users. Members increase their community rating by helping other users. Members receive recognition by posting tutorials and articles. The community also includes a discussion forum that is continually monitored by paid community experts.

The solution

We believe that peer learning that is structured around Activity Centred Design can solve many of the language learning problems that occur in mergers. With both groups of employees needing to learn the language skills that the others already possess, the main
focus of this part of the community will be connecting people together and helping them to learn from each other. In this process they will not only efficiently learn a new language but also develop relationships and an understanding of a new culture.

For this part of the community we recommend a MOO based interface similar to that of Tapped In. A MOO environment affords the in-depth involvement required in language learning. Using a virtual environment will also allow employees to see and interact with the artefacts that are part of culture of the language they are learning. In the natural learning environment users will be encouraged to add objects and pictures that represented their culture. This will also be important in programming language environment where cultural artefacts could include examples of code or pictures of prominent people who developed the language.

For this part of the community to work it will be important to provide a structured curriculum similar to that provided in the Language Exchange community. There will need to be instructions explaining how users can work together. They should also be able to work together through existing lesson plans that scaffold their interactions. Lesson plans should be created to simulate the business settings in which they will be using their new language. People should be encouraged to work with partners as well as in larger groups. Professional language teachers should be used to moderate the site and help people learn from each other.

Properly motivating the users will be a key factor in the success of the language community. The social aspect of the site should provide for some motivation, but it will also be important to provide recognition for those that have been helpful to others. In a merger where change is imminent, people will be motivated to seek out positive recognition. Major contributors to the peer learning environment should have their profiles listed on the main community site and be officially recognized by upper management.
Learning basic language skills is a prerequisite to understand other national cultures, which again is important in understanding corporate culture. Language skills and language of practice often go hand in hand. After employees have learned basic language skills, peer learning could benefit from taking place in the actual situations related to specific work practice. It is also possible to learn language of practice using this tool. By using visuals and peer discussions about simulated work practice, scaffolding exchange of knowledge is also likely to be a result.

Visual Representation
Visual representation is an effective medium that can be used either alone or in combination with other tools in the OLC. Video clips can help establish common ground, as it is often easier to develop mutual knowledge about a visual than merely a discussion. In this respect, the situation or context in a visual is a “boundary object”. Important concepts and knowledge can be highlighted by use of visuals. This can bridge gaps between different corporate cultures.

**Problem: cultural gaps and different mental models**

For employees of two companies to come together into a new culture they will need to develop shared mental models describing the new company. One of the problems found in the Age-Nouvelle merger was that single experiences were generalized to describe all things about the new company. Employees from Age would visit the overly extravagant and modern headquarters of Nouvelle and assume that all other Nouvelle sites were similar when in fact many lacked sufficient resources. This led the Age to make incorrect assumptions when there work delays occurred.

The development of common ground also involves creating familiarity and relationships between employees. This can be an extremely time-consuming and expensive, especially when teams are geographically distributed. In the HP-Compaq merger, management addressed this issue was by requiring employees to include pictures of themselves in their email. Although this was a positive step, it probably didn’t go far enough in creating familiarity among team members. Another problem experienced in both of these mergers was the difficulty employees had to adjusting to each other’s communication styles. In the Age-Nouvelle merger, the Age’s managers were given aggressiveness training to prepare them to work with the Nouvelle managers.

**Existing Communities**

Teachscape [http://www.teachscape.com](http://www.teachscape.com)
As quoted from their website: “Teachscape is a team of educators, staff developers, multimedia producers, technologists, and researchers dedicated to working with school districts and other educational institutions to provide the highest-quality teacher professional development.”

From the Teachscape community we take away the use of video clips as a valuable tool for reflection and modelling behaviour. Teachscape has a plethora of high quality video clips illustrating the practices of teachers as they work in the classroom. This is a different approach than most instructional videos that use staged scenes and professional actors. The video clips provide rich information in a format that is entertaining to watch. To reinforce the important aspects of the videos, a text outline listing important themes is shown to the side with each item highlighted as it occurs in the video.

As quoted from their website: “Using video cameras to connect the youth of the world, films have been made by children from the highlands of Guatemala, the streets of San Francisco, a mountain town in Colorado (USA), and the inner-city of Mexico City - to name a few. We currently have 20 films from 10 different countries, exchanged with the aim of promoting inter-cultural tolerance, world citizenship and caring.” The Global Video Exchange effectively uses video to create common understanding between people. Global Video Exchange puts the video camera in the hand of the teenagers so they can use their creativity to give others insight into their life.

The solution

We believe that the appropriate use of video clips in OLC can be an effective way for establishing common ground and developing relationships between employees of merged
companies. Interacting around visuals can get a better picture of other peoples work settings and work practice.

The first step we propose is to have employees from different departments create a simple video showing the area in which they work. This would include an introduction of some of the people they work with, and a tour of their work environment. In addition, each employee will have the option of creating a short video describing his or her current work and interests. These will be indexed in a database and made searchable by name, job type, and interests. This will not only help employees get to know each other, but it will also provide a tool for upper management to learn about their new employees. In addition, this database can be used to get a better understanding of peoples’ language of practice.

The second step we propose is to have several meetings video taped. Employees will be able to use the videos to reflect on their communication experiences. Video clips of successful meetings will be uploaded to the community website and used to model productive communication. This could gap differences in communication style, and support learning from each other.

Community Events

Community Events are preplanned events that seek to bring people together and build relationships across company boundaries. When people meet informally in organized events, they build new relationships in a social setting. The threshold for interacting and communication with new people in other parts of the company will then become lower, and people are more likely to contact with each other after social gatherings. Community Events may also be useful in building one new identity of the company. For employees it is important to identify with the new company and becoming an “insider”.
Problem: Subgroup Phenomena

Social identity theory suggests that people often classify themselves and others into social categories (Ashforth & Mael, 1989). Organizational membership such as employment within a company can provide a strong sense of group identity. A strong identity is difficult to change, but in merger situations these subgroups have to collaborate and develop a common identity.

When two companies merge the development of new social identities may take more than the change of a company name and implementing a new brand. Previous research has shown that physical proximity is a key variable in forming shared identity (Crampton & Hinds, 2003). Close proximity has been shown to increase trust, attractiveness, and persuasiveness (Moon, 1998). When companies merge in today’s Knowledge Age, it is common for the new employees to be geographically distributed. In the Age - Nouvelle merger, companies were located across two countries in Europe. The IBM - Lotus merger involved employees located across the globe. Although the need to create unity across geographic distances is not unique to merged companies, it is amplified by their need to combine the identities of two groups into one.

Existing Communities

In her book Community Building on the Web, Amy Jo Kim (2000) discusses the importance of rituals, community holidays, and other scheduled events for creating a close community. According to Kim, “as a community builder, you can deepen your members’ sense of belonging and develop your culture by celebrating yearly events that are meaningful within the community context.” Kim also suggests that you can reinforce a shared identity by creating holidays that are unique to your community. Holidays or events that recognize the efforts of community members will be particular effective. The following site offers some imaginative community events that we borrowed from in
designing our online community for mergers.

Fanstory [http://www.fanstory.com/contests.jsp](http://www.fanstory.com/contests.jsp)

Fanstory.com is a community for “writers and readers”. Hundreds of amateur writers post their stories for others to read and review. The pulse of the community surrounds several writing contests that members can suggest, develop, and participate in. Each month at least one contest takes place in which writers submit a specific type of story. Prizes vary but in all of the contests the winners work is presented prominently on the site and his or her member ranking improves. The contests are well advertised with a clear start and end date. In addition, the contests seem to motivate community members to contribute to the community. Most importantly, the contests highlight the talent of community members.

The Solution

Hosting regular scheduled events will be important for attracting employees to the online merger community. We purpose several events. The first event will be an online cocktail party where all members of the company will be asked to log onto the communities avatar based chat system. This community event will officially last for one hour, and games and activities will be included to encourage communication across groups. Top executives will also be included in the event and they will give away prizes at the conclusion.

The second event will be a contest in which employees will submit personal stories about their work and experiences in pre-merged companies. All stories will be posted online for others to read. The winner will receive recognition from management and of course a monetary award. The narratives can be useful tool to increase awareness of tacit knowledge. Linde (2003) describes narrative as a representation of past events in any medium: narratives can be oral, written, filmed or drawn. These online narratives can also be filtered and edited, and later become a part of the company’s knowledge database.
Informal Discussion

Informal discussions among employees create learning opportunities. This informal learning is often recognized as the source of creativity and innovation.

Problem: missing “real life” informal discussions

“Water-cooler effect” is the effect created by multiple employees having an informal, face-to-face conversation. Informal conversation can create new relationships, learning and innovation. The effect is subtle but could be significant.

Vendors, such as AskMe Corp., Orbital Software and Tacit Knowledge Systems, developed knowledge-sharing software that links people together. Their clients’ companies also believed that such knowledge sharing software functioned as an electronic version of the company “water-cooler”. However, it is often claimed that no matter how well the software is designed, technology just can’t take the place of real, live conversations.

As Doz et al (2001) explain, innovation opportunities lie outside the traditional place where multinationals look for innovative technologies and emerging consumer trends. They also state that the pockets for innovative process contain tacit knowledge (Doz et al, 2001). Gathering dispersed knowledge from the world and developing innovations could be crucial needs for global companies. Many successful companies have found that knowledge management strategies and practices are central to ongoing innovation.

The question that we address is how online communities can help to create new relationships without a clash of two cultures, and how online communities encourage the process of creating innovations.

Existing communities

7 http://www.wordspy.com/words/watercoolereffect.asp
The case study of Hewlett-Packard Co.

http://itmanagement.earthweb.com/erp/print.php/11072_620191_3

According to Hewlett-Packard (HP) technical consultant, Kartik Subbarao, HP has been using company-wide newsgroups since 1982; HP runs more than 100 intranet-wide newsgroups, based on NNTP technology. His consulting division is geographically distributed with over 5,000 employees worldwide, and these newsgroups are helpful for mobile workers as well. Subbarao states that the newsgroups create a chance to associate overheard remarks, which increase productivity, in virtual place. It is true that newsgroups restore some interactions eliminated within the communication by e-mail; however, this community is not specifically concerned with innovation and creativity.

Forums: the Water Cooler, The Business Technology Network

http://www.informationweek.com/forum/IWKForum

This forum is a part of the website The Business Technology Network. Its interface is generic discussion-thread, ordered chronologically. The topics are hobbies, current events, gossips, etc. However, we do not observe many active interactions among the forum visitors, as responses to messages were often not added until a year later. This illustrates that this virtual “water-cooler” does not function as the real one where people have synchronous conversations.

Our solution

To enhance employees’ creativity, firms encourage them to loose the ties of formal coordination inevitably inhibits creativity (Brown & Duguid, 2000). To create new relationships and a “water-cooler” effect, we present two solutions: a discussion forum controlled by staff employees, and instant-messaging (IM). Both solutions should not be controlled by managers, as instant Community Events are.
Random topics or spontaneous conversation is one aspect of a “water-cooler” effect. There are many virtual communities in which people discuss topics unrelated to business. Why doesn’t it occur within a company? Brown & Duguid (2000) state that decoupling organizational links can provide room for the new ways of thinking outside traditional corporate structures. Decoupling links also supports Wenger’s (1998) idea of “boundary objects”, and Engeströms theory of two Activity Systems converging in object1.

IM can be an effective tool for starting “water-cooler” discussions. Tapped In and TeleCHI successfully meet an overall goal of providing a virtual place for the community of practice together. The synchronous communication properties of IM, encourages people sustaining this community (Bringelson & Tom, 2000). The metaphor of a physical conference centre of Tapped In also helps novices sustain this community (Shank et al, 2003).

We promote unmediated discussion; however, if controls are not used, how do OLC managers ensure that the discussion of communities is appropriate? Cothrel and Williams (1999) present one principle; “resist the temptation to control.” However, it is uncertain whether the benefits of control are worth the potential drawback of dampening the creative spirit that fosters innovation (Cothrel and Williams, 1999).

**Career Guidance**

Career Guidance gives more options in choosing career path in the new company. By addressing this issue, the company focus on possible benefits - maintaining high retention rate after the merger.

**Problem: Retention of Knowledge**

When companies merge, employees can feel uncertain about the future of their job. Particularly, employees in small companies worry about losing the freedom of their career
choice as well as the possibility of being laid-off by the larger company. Thus employees may start looking for new career opportunities outside of the company.

“One of Cisco’s core strategies for growth is acquisitions, and one of the primacy purposes for acquisitions is for the engineering and R&D talent.”

- Barbara Beck, VP Human Resources

Cisco says that the acquisition is not of technology but of people - and that all efforts must be made to retain this pool of talent if the acquisition is to be successful.

In case IBM -Lotus, IBM has better career-development system rather than Lotus: in IBM, there are two tracks for generalists and specialists (mainly for engineers and researchers at R&D); clear requirements are listed to achieve promotion; IBM provides structured-corporate training courses. On the other hand, new employees at Lotus have to learn through apprenticeship - learning from other people - and through on-the-job training; learning outcomes were varied depending on sections. Both companies enhanced people’s potential in their own practices. How can the company after merger integrate both strengths?

A larger company also provides more career options because of its wide range of business. An OLC can assist employees to take advantage of broadened opportunities.

**Existing communities**

**MentorNet:** The E-Mentoring Network for Women in Engineering and Science

[http://www.mentornet.net/](http://www.mentornet.net/)

MentorNet is a non-profit initiative sponsored through partnerships, grants and donations, such as IBM, Intel, Cisco Systems, governments and private foundations. It is open for male or female professionals with an educational or professional background in engineering, related sciences and technologies, or math. MentorNet offers the following: a one-on-one mentoring-program, MentorNet E-Forum, a resume database where students can post resumes online, links to related sites, and recommended reading lists.
This is a great site as an information portal for seeking career in engineering. The site is open both for male and female; however, most discussion topics at the e-Forum are related to gender issues. Overall, the site is specifically designed for the purpose of career choice. The learning for career development is not integrated well.

**Our solution**

In the IBM-Lotus case, IBM utilized the intranet system of Lotus; employees from IBM became familiar with the Lotus style of communication. On the other hand, the career development structure of Lots was integrated with IBM. For the career resource centre we recommend to integrate well-structured learning curriculum with selected software platform.

To accommodate personalized-learning, the mentoring and online learning courses integrated with community offer a promising solution. In the beginning of online courses, people are motivated; however, they may need additional motivation to reach their ultimate goals. Fogg (2002) states that networked computing products can intrinsically motivate people at a group level. People can accomplish a greater degree of behavioural change, including changes in their attitudes, when working together vs. working alone (Fogg, 2002). Fogg also claims that connected products can allow other people to be virtually present; thus the products can be used to motivate better performance by creating a virtual social group.

Communities discussed above can be referred to for the discussion of mentoring. Furthermore, the learning community within a company is a closed forum; thus, it has a potential to create more tied relationships. According to Kim (2000), to sustain a sense of intimacy and familiarity within the larger setting, community managers need to create sub-divisions, as all large-scale communities do.
Community Evangelist

A Community Evangelist can provide motivation among employees, facilitating a delightful experience to entice novices to remain involved in the OLC.

Problem: use and sustain of OLC

The role of community evangelist is important to sustain online communities. As Mark Schlager of SRI International mentioned, the role of agents to support novices has been significant to activate the Tapped In community. Similarly, evangelists help novices to experience “membership life cycle” (Kim, 2000), from visitors to regular participants. According to Kim, novices should be welcomed for the first favourable experience, and instructed about the customs by leaders.

At the case of merger, network specialists introduce technology to connect people and their environment seamlessly. However, technology alone does not scaffold learners to change their communication style and the attitudes to contributing the community. Furthermore, business workers cannot spend much time as community evangelist because they have their main responsibilities. In this section, we present the role of evangelists in the first era of online communities.

Existing communities

Lotus Developer Domain: Discussion Forums


The Lotus Developer Domain is a public discussion space for Notes application developers, and for business consultants promoting Lotus products. Lotus does not assign any employees just for growing this community. However, the employees understand that if this community grows active discussion place, it represents that this product could be beneficial for business operation; that is, IBM-Lotus utilizes this forum to promote its own
business - a win-win situation. In one forum’s case, the evangelists of the first era were business consultants in Europe and developers at Lotus working in Cambridge. They were geographically distributed and in different organization, but still shared the same aim. Both of them wanted to increase its product’s recognition; thus, they voluntarily supported growing the online forum. Currently, this developer domain maintains eleven forums, and also has archived inactive forums as knowledge-base.

Our solution

Most online communities do not grow as we discussed above. Considering Cisco’s case studies, the tips of evangelists at merged companies is as follows: welcoming new members, cultural integration by the team called “buddies” to ensure the bonding of two cultures, offering personalized attention to convey the Cisco’s values, using communication to build a network. Kim (2000) also states the role or evangelists in general: welcoming messages and gifts help novices sustain its community.

In the case of IBM-Lotus, evangelists contributed to sustain the community in the beginning; however, the community started growing on its own. As Brown & Duguid (2000) claims, learning is usually treated as a supply-side matter. Conversely when there are learning needs, if the resources are available, people can learn quickly and efficiently. They also metaphorically describe learning as knowledge theft, taking a demand-side of the view of knowledge; in other words, learners seek for knowledge. Evangelists in learning communities should be responsible for finding learning needs and providing sufficient resources, “provoking the need and making the resources available for people to ‘steal’” (Brown & Duguid, 2000).

Conclusion
A merger is often a time-consuming process characterized by ongoing discussions about the company’s future. There are both conflicts regard to financial goals, interests and values. The OLC can be a fun tool for the employees that shift the focus to something positive and beneficial to the employees. In addition, introduction of the OLC itself can also be an example of that “something is happening” in the time-consuming merger.

In merger situations, individuals have to learn to become a new community member within the entire corporate culture. The feeling of belonging to this new community and of being an “insider” is essential for the individuals in the company. Use of an OLC can be a mediating artefact developing a new corporate culture and sharing knowledge between the merging companies. Our OLC will bridge cultural gaps through communication and community building. In the design of OLCs for corporate learning, community owners have to consider the business strategies as well as cultures, both corporate and national.

In this paper we have described a framework and toolkit to assist companies in the turmoil brought about by mergers. We have emphasised design solutions that addressed the problems that we encountered in the case-studies of mergers. Our design included many different tools; these tools can be used in multiple ways to provide solutions for varying contexts. We particularly focused our OLC to serve as a tool during the early stage of a merger. However, to sustain and develop the new culture further is a continuous challenge. After this initial period, the OLC can be the basis for the company’s further development of Knowledge Management and the learning organization.

At this time, OLCs have not been extensively used as a tool to assist in the merger process. However, many companies use eLearning and knowledge management tools to bridge the gap between two or more corporate cultures (Edmonds, Trondsen & Hoffmann, 2001). We purpose that these tools will gain effectiveness when merged with the affordances of an online community of learners.
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