Abstract

As the world globalizes students need hands on experience at participating in global communities of practice (COP) for advanced knowledge creation. This paper discusses the innovative use of the Map, Bridge and Integrating Model (MBI) in a virtual setting. Here students learn to harness cultural diversity in a virtual COP. What the research discovers is that sharing cultural knowledge leads to higher levels of problem solving even in a virtual space. Furthermore, COP is a powerful and exciting way to learn.

Keywords: E-Learning, Communities of Practice, Virtual Organisations, Culture.

Introduction

Culture has become a significant issue in the last decade as companies have expanded globally, due to the power of information and communication technologies (ICT) (Braun, 2002). ICT has allowed multinational companies to link together to form virtual organisations (Franke, 2001). Students urgently need to be trained to operate in this new world. This study proposes using MBI model to conduct cultural training and use this to form a COP to solve problems. The research question answered is:

How can students learn to harness cultural diversity in virtual communities of practice in a global business world?

The following learning outcomes will be the focus for this research question:
• Practical application to the workplace of theory on COP’s and ethnic cultural diversity.
• Understanding of the issues behind technologies virtual global communications
  • To develop new approaches to train students for working with cultural diverse organisations

The research question is answered by simulating a COP between New Zealand and American postgraduate students, both groups contained members from diverse cultures. They worked through the MBI model and then set up a virtual COP to solve problems.

Literature Review

Students need to operate in a global business world, where frequently they will not only work face-to-face, virtually with fellow professionals. In the global business world there is potential to use cultural knowledge to develop new ideas and solve problems from the wealth of perspectives this diversity offers. COP have always been a good way to achieve this face-to-face but now with easy to use collaborative technology, these COPs can exist seamlessly online. However getting employees to use these systems has always been problematic and this dramatically increases when diverse cultures have to be transversed. To understand these issues more fully the following literature review will outline: what a COP is, and how this concept has evolved with the virtual organisations. Then the paper will look at the MBI model and how it can be combined with ICT to help global communities to harness culture.

COPs are frequently confused with virtual teams, however as we will see teams are transient where as COP are more permanent and rely on higher levels of trust (Kimble, Li, & Blanchflower, 2001). As such the majority of virtual team theory is weak on the necessary
skills needed to form virtual COPs, relying on the bond of “swift trust” brought from task completion (Jarvenpaa, Knoll, & Leidner, 1998; Tucker & Panteli, 2003). Wenger, the guru of COP defines a COP as a group who shares expertise on a given area of knowledge (de Cagna, 2001). They have a community, a set of people that come together to share, interact, think and develop relationships. They then take ideas back to their work apply these ideas in their specialised area. A more recent trend has been for COP to expand to be global as ICT has allowed organisations to link internationally with low cost and ease. Here staff need to learn how to operate in both a technology dominated virtual culture and one with diverse ethnic culture. The educational sector also has undergone mass globalisation with classrooms becoming more diverse. This offers great opportunity to explore diversity using online COPs and provide business skills for students.

Culture is defined for this study as “…the complex whole that includes knowledge, belief, art, law, morals, customs, and any other capabilities and habits acquired by humans members of society.” Bell & Williams (1999, p. 2).

From this definition we can see that culture is a shared system of meaning and patterns holding societies together (Hoecklin, 1996). Culture is also seen as relative, that is, each group has their own worldview and no one culture is superior or inferior to the other. Culture is seen as having different layers. The first layer is established during childhood and is the hardest to change. The next layer is learned by education or professional training. Another layer has to do with practices, such as professional ethics. Research in this area has shown that changing culture is hard, particularly at the first level and culture for this study is defined as this level. This complexity has meant many companies have failed to manage culture well. As any business person will recant mixing of diverse culture often has the reputation for trouble (Hoeklin, 1996; Persaud, Kumar & Kumar, 2001). Despite these disasters, companies need to compete globally, form virtual COPs and use them to harness the knowledge of the workers. Moreover, those that do succeed at harnessing cultural differences have gained substantially greater innovation, increased profits. Thus harnessing this diversity is strategically important.

Although there is a body of knowledge on virtual teams and cultural diversity, this research has the weakness of forgoing long-term relationships for the notion of “shift-trust”. COP’s in contrast are more enduring and rely on deeper levels of trust that are not so necessary in brief team relationships (Panteli, 2005). In the world of online learning the concept of community formation and the importance of socialisation has been well established in practice. In the virtual business world the importance of this for function for challenging problem solving is only just beginning to be realised (Tu & McIsaac, 2002) and despite basic communication skills being outlined in research this has not yet been developed into an effective training method for virtual COPs. One framework that may provide a solution to these issues is the MBI Model (Distefano & Maznevski, 2000). The MBI was developed from research and now uses as business training tool by a global consultancy group. However up until now this training for global teams has been done face-to-face but it is believed that the model can also be readily adapted for virtual COPs. The research that underpins the MBI model showed that global teams take on three forms: destroyers, equalisers, and creators:

• **Destroyers** are virtual communities that perform extremely poorly. Members of such groups mistrust others, guard information jealously, and take every opportunity to attack other members.
• **Equalizers** ignore ethnic differences and the suppression of perspectives compromises results.

• **Creators** these communities understand cultural differences this results in the ability to appreciate new ways of looking at issues within the correct cultural context that leads to enhanced innovation.

MBI seeks to move groups into the third type, the creators. The reason for enhanced innovation capabilities that result from MBI, are due to the different philosophical approaches that cultures have to problem solving. The three phases of MBI are:

**Map.** This phase is about understanding the difference. Here people recognise their differences and address that they maybe important.

**Bridge.** This phase is about communicating the difference. Here three sets of communication skills are practiced, a foundation, de-centering and re-centering. Here people learn to move away from their personal centre and experience the culture of other people.

**Integrate.** This phase is about building on the difference synergies. This uses the skills built from mapping and bridging to solve issues and make quality decisions, using traditional skills of managing participation, resolving conflicts and building on ideas.

By using MBI, virtual COPs can help understand the cultural context. It is theorised that MBI could be enhanced by the use of ICT. MBI has traditionally been used in a face-to-face setting. However, for some virtual organisations this is a luxury they may not have (Palmer, 2003). Conducting the MBI model in a virtual context would be a great advantage as this makes training more rapid; saving, time, money and security issues.

To facilitate the change to virtual context required several changes. The first modification was the addition of the socialisation phase, named “Meeting” (see figure 1). This would establish the long term community development necessary for COP formation. ICT was then applied to the three phases of the MBI. Despite there being numerous collaborative technologies available, at the present time many are not cost effective or maybe beyond the staffs skills to use (Richardson, 2005). Technologies such as video conferencing are too costly, too complex or pose security issues for many companies. Thus the technologies chosen to take this into a virtual context were a combination of; email, forums and chat. Technology was selected using the media synchronisity matrix (Dennis & Valacich, 1999), as well as drawing on the expertise in of social group formulation from e-learning (Green & Eves, 2001).

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**Figure 1. Creating value from cultural diversity: adapted MBI (Distefano & Maznevski, 2000).**
E-mail was used for initial contacts, as part of a socialisation phase. This began with a
detailed and friendly introduction being sent by members of the groups. As e-mail has the
ability to be asynchronous it allowed for quick response, which can help lead to high trust
building and also help share information rapidly. The asynchronous ability of e-mail also can
provide flexibility in disbursed settings to overcome time-zone. The next phase that was MBI
training, as the diagram (figure 1) illustrates a formal weekly combination of posting
questions from the cultural orientation framework. This was the first weeks set of questions.
Asynchronous forums were used to post these questions, as the media asynchronous model
emphasises forums that are good for when parallel discussions are needed. This provides time
to reflect on the questions prior to posting a response. At the end of the week a two hour chat
session is held. The chats were used to bring consensus. This way for each category of
students would work through the mapping and bridging phases of the MMBI. This was
repeated for five categories of the cultural orientation framework. Once this cycle of
questions was completed, then an online COP was set up to harness cultural diversity. This
was done using forums with an e-mail list server. This allowed the group to gain the benefit
of the synchronous and asynchronous abilities of this software. Here weekly posting were
made by one group member on a cultural issue they had experience at work and the group
used their diverse cultural knowledge to help provide solutions.

Research Design
This research used an adaptive approach with methodology, combining established IS
techniques and adapting them to the unique setting of this research (Coulthard & Richardson,
2004). Action research was the dominant methodology chosen for this research, as this
project was educational based and wanted to adapt current techniques to a virtual
environment for student learning. Critical and participatory action research was used adapting
Mezirow's (1990) method with appreciative inquiry to reflect the positive outlook of MBI
(Fry & Barrett, 2002).

Setting & Participants -The study was conducted between two postgraduate MBA classes,
based in New Zealand (NZ) and the United States of America (USA). Both classes contain
significant ethnic diversity. The USA group had one male and two females (USA, China,
Japan). The NZ group comprised of three females (English, China, Singapore, NZ).

Data Collection, Training, Data Analysis and Validity -Data collection included the group’s;
e-mails, forum postings and chats (Stewart et al., 1999). Data analysis occurred
simultaneously with data collection, starting at first contact and ending on completion of the
writing of the rich description. Internal validity came from pragmatic and consensus
validation (Whyte, 1991). Generalisability for this study came from the use of rich description
combined with storytelling allowing the reader to reflect beyond the study.

Findings - When East Meets West -We Discovered a Powerful Way to E-Learn
This study started to explore cultural diversity and develop techniques to teach students how
to harness their cultural diversity in virtual COP’s. The story unfolds
Like many virtual COPs, we were rushed together to take advantage of this business
opportunity. How did we do it? First we met in cyberspace, quickly swapping information
about ourselves, our families and lives; and also what business knowledge we wished to
share. From here we had firm ground to start the real work. It was the time taken to form a
group that would lie at the heart of this project’s success. This is demonstrated below in one
of the first e-mails that we exchanged:

Helen,
Hello back! Nice of you to initiate the dialog.

New Zealand sounds beautiful, I'd love to visit someday. We are a diverse group ourselves, Soko is from Japan and Haiying is from China. I am a native Californian. I'd say about half our class consists of foreign students. Fullerton is a short distance from Disneyland (our school has been called "Cal State Disneyland" by those who don't mean it as a complement). … I'm the elder statesman of this bunch, married with 2 boys. I'll let Soko and Haiying introduce themselves.

I think we would make a fine group, I'm sure Soko and Haiying would agree. To facilitate the sharing of data and communication, I have set up a Yahoo! group. I'll send details soon...

~ Mark

So we worked through the MBI framework, posting answers to cultural questions each week and chatting live each Friday night. We sought to find out how we differed and how we were similar and to use these to move forward where we could integrate and use this to harness our cultural differences to create new knowledge. However, along the way we had new surprises and insights into the challenges of working towards cultural understanding. Firstly, a third culture arose, named Information Technology. This third culture could dominate our whole group and take over how we communicated and what we said. Sometimes it cut us off, completely separating the whole group, at other times it just isolated one team member, leaving them as a cyber orphan. On other days this culture empowered the whole group and linked us up and made us feel that we were side by side, and we could achieve anything. A mere Ocean could not stand in our way of achieving business success. So there we were East, West and Technology. As Soko and Helen saw dealing with an urgent misunderstanding:

Soko > I am thankful to technologies since we can have such an immediate response!!

However technology could also destroy communications, as the following exert shows:

Helen has left. [ 06:10:38 PM ]

Mark> What happened to Helen?

Soko> Same thing happen to me when I got a phone call, the line was disconnected.

Soko> But I don't know what is happening to her.

Helen> My computer crashed, it is having some problems since it got a new graphics card!

We quickly learnt to harness this new Technology culture too. We used recordable chats so people could participate even when their computer crashed. We used forums that organised our ideas and let the whole group see them. We learnt its new mysterious language too, of /\ and BTW. Some group members had more exposure to this technology language, but others needed to enter this unknown territory. We even began to add our own shorthand of OB, COP and Mark’s favourite of zzz, as our chats would go over midnight in the US. We also found the need to use standard symbols like exclamation marks and questions marks more frequently as in the virtual world we could not use our faces to make these points. From here our group could evolve, we formed a community before anything else. We created an environment where people were encouraged, not discouraged, to ask questions. As such we had to learn to agree so we could disagree later! For this is the paradox of a COP, that you need to be able to disagree but not argue. An important part was the need for clarification, as often less is said in a virtual setting as you have to type it in. There were other comments also that drew surprises in our study; we found how similar we all were. As we worked through the questions on the cultural framework, England seemed to be a lot like Japan. That busy
work environments made us focus on today but there was much to be learnt from the past and
to survive we need to find time to look to the future:

Mark> As I mentioned, US companies are starting to move to the "harmonious"
relationship after having been in the Mastery relationship for so long.
Soko> Japan also used to abuse environment, but these days the situation has changed,
and many companies are trying to go "harmony".

But it was more than that. What MBI taught us was how to respect each others’ differences.
We learnt to respect what may seem like an extreme idea as just a new perspective. With this
respect we created trust, as we later found when we began our COP the greatest surprise was
yet to come. In our COP we saw a wonderful place where ideas could freely flow and a spiral
of knowledge that built on a single idea, at a rate of speed we could not believe, it was
breathtaking experience. Everyone was thinking on so many levels but still it all made sense.
We found out that you can read all you like on COP but you have to be part of one too see
their worth. Our COP was a place where community members rushed off and searched for
more information. They were excited by the knowledge that was being created. Knowledge
creation led to more knowledge creation. As group members described the excitement on the
first day:

Soko>Morning from CA! Wow, lots of e-mails!
Helen> Yes Mark and Soko it is interesting stuff, I think we are beginning to see the
power of a COP
Rebecca> I have been amazed to see the responses and the issues that have arisen from
my case. …The website and articles that were suggested were fantastic. Thanks.

Looking back now, you can see how what would have been awkward situations before, just
fell away. For instance, Soko had been happily using the abbreviation Jap. Mark braved to
tell her the truth, that if a European said this it would be racist. And so our COP continues,
beyond the course, is added to daily, giving us new insight and ideas.

Discussion
This study succeeded in creating techniques to train students how to harness cultural diversity
in global COP. This was achieved by all three learning outcomes being fulfilled: exploring
both organisational theory in a practical setting, virtual ICT use and creating training
techniques for students in virtual global COPs. Firstly it was seen that that the MBI can be
successfully used in a virtual setting, using inexpensive collaborative tools. That this model
led to mutual respect and trust in virtual space by creating an environment where people were
able to ask questions and share stories that were ethnically sensitive and work together using
their different perspectives to solve these issues. Students already began to use the knowledge
learned beyond the classroom and take it back into the real world situation. Students also
found that they enjoyed learning this way and found that sharing cultural knowledge and
using a COP elevated their enthusiasm for learning, particularly at the higher academic levels
of; knowledge seeking (articles, people), sharing, self reflection, peer reflection and
integrating. The second learning outcome of understanding technology limitations in virtual
space was also well explored. Modifications were needed to transfer this model into a virtual
context. This was achieved by addin the socialisation phase, as in a virtual setting normal
protocols of human behaviour are often forgotten. Secondly it was necessary to make sure all
the media used was archived. For the first and second leaning outcome, the next issue was
that awareness was needed of members who are struggling with a second language and also
those coming from a culture where members do not speak out. These people needed to be actively encouraged for them to participate. Furthermore, that text symbols need to be used with care, they can often alienate people who do not understand them. This research adds much to both theory and practice. Theoretically greater understanding on how to harnessing cultural diversity online in a global business has been gained. Specifically the MBI model has been adapted for being conducted in a virtual context. This study has also extended the theoretical understand on virtual COP and how they can harness diversity and use this to train students for working globally. There is also scope for future research to trial the MMBI as part of formal assessment.

Conclusion
Students of today will go on to work in a new globalised business world, where they will participate in virtual COPs to help them harness knowledge. However this can only be done to its premium if students learn to also harness cultural knowledge too. This study found that sharing cultural knowledge can be achieved using the MBI model virtually, bringing strong bonds of trust and friendship. Care though needs to be taken, to ensure that socialisation is built into how the technology is used. Lastly this study showed that the benefit of COPs cannot be emphasised enough, that the students found that solving problems in COPs was a powerful way to learn.

References


