Managing Virtual Teams in a Virtual University - Students' Experiences

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Introduction

Traffic congestion, parking problems, and rising transportation costs are forcing people to use electronic medium to communicate and stay in touch with each other. Decreasing costs, increasing speed and reliability of IT has enabled people to use this medium. Mergers and acquisitions across borders have emerged as a growing trend. The business is becoming global in scale and perspective. The developments have encompassed every business activity- education being no exception.

The advancement of information technology is already transforming the education industry in a large scale worldwide. The opportunities for learning via the electronic environment are virtually limitless. E-learning transcends typical time and space barriers, allowing students to access learning opportunities day and night from various corners of the world. In higher institutions, e-learning is making it possible for non-traditional students, those with families, full time jobs and all other kinds of responsibilities, to earn degrees, enabling learning to become a lifelong enterprise. The growth in this sector has been phenomenal. A recent survey (IHEP Report, 2000) by the U.S. Department of Education's National Center for Education Statistics (NCES) found that from 1994- 95 to 1997-98 the number of distance education programs increased by 72 percent. Moreover, an additional 20 percent of the institutions surveyed plan to establish distance education programs within the next three years. The survey estimated that more than 1.6 million students were enrolled in distance education courses in 1997-98. A major part of this distance education is through the use of electronic medium. There is a growing recognition of the fact that e-learning will be critical to the success of individuals, organizations, communities, and economies in the dawning knowledge economy.

The growing market of e-learning now faces the challenges of equaling the success of traditional classroom. As there are some serious opportunities in all this, there are many obstacles to overcome. One serious drawback of this system is that it lacks human touch. However, by the use of virtual teams universities offering such kind of learning environment can overcome the problem of lack of human touch. We need to develop ways and means of making such virtual teams of students work effectively.

Virtual Teams

As organizations become increasingly global in their operations and perspective, the need to utilize virtual teams whose members are dispersed around the world is being increasingly felt. Virtual team, sometimes called a computer mediated group or electronic group, is a team of people who work together and solve problems through largely computer-mediated rather than face-to-face interaction (Schermerhorn, 1999). A virtual team is simply a work team that meets and does its tasks without everyone being physically present in the same place or even at the same time (Hellriegal, Jackson and Slocum, 1999). There are several different definitions of virtual teams, but what these definitions have in common is that, in addition to being a team, virtual team members are physically separated (by time and / or space) and that virtual team members primarily interact electronically.

Jane Henery and Meg Hartzler (Seanet's Web site) characterize virtual teams as follows:

- Members are mutually accountable for team results.
- Members are dispersed geographically (nationally or internationally).
- Members work apart more than in the same location.
- The team solves problems and makes decisions jointly.
- The team usually has fewer than 20 members

Where did virtual teams come from?

In the mid 1980's, managers in high-technology companies realized that it was possible to manage out of the line of sight: to produce products and co-ordinate operations using resources at a number of separate sites. So we saw communication strategies and management practices for what were then called 'distributed groups'.

The term virtual teaming was coined in the early 1990s to describe a team, that is, people who collaborate closely, whose members are not in the same location. In the past five years we've seen a rapid increase in organizations adopting this way of working. The principal enabler is of course Internet-based communications technology. This has made it possible for more people to communicate relatively easily across cities, countries and continents. Virtual teaming isn't restricted to large corporations with their own internal network - the necessary technology is now readily available anywhere. Also, people now more readily accept communicating electronically (Gundry, 2001).

Virtual teaming isn't something anyone planned. It happened because the technology was there (David Gould, 1997). But how well are these teams really working and what can be done to make them more effective? What are the pitfalls? What leadership skills are needed to make the virtual teams work well? In order to address these issues, it was decided to do an experiential study with a group of students studying in a virtual university - University Tun Abdul Razak (UNITAR), Malaysia.

About UNITAR

University Tun Abdul Razak (UNITAR) is a virtual university wholly owned by KUB Malaysia Berhad. It started its operation on 18 December 1997 when it received the invitation letter to set up a university from the Minister of Education, the Honorable Dato' Sri Mohd Najib Tun Abdul Razak. The Minister launched the university on 21 December 1998 at Kelana Jaya Study Centre. Subsequently, it received its establishment letter in February 1999 from the Ministry of Education. The Chancellor of UNITAR is the Right Honorable Tun Hajjah Rahah Tan Sri Haji Mohd Noah, wife of the late Tun Haji Abdul Razak, Malaysia's second Prime Minister. Its current Chairman is the Honorable Datuk Hassan Harun, Chairman and Chief Executive Officer, KUB Malaysia Berhad. Its current President/Chief Executive Officer is the Honorable Datuk Dr. Syed Othman Alhabshi. UNITAR received its first 162 students in September 1998, and student population has subsequently climbed to about 7,000 by August 2001.

UNITAR now offers more than 10 academic programs in the fields of Business Administration, Information Technology and Humanities and Social Sciences from first to doctorate degree level. UNITAR is a virtual university where students and faculty members engage in learning and teaching activities through the mixed use of face-to-face, online and multimedia environments.

Education at UNITAR is unique. Yes, there are still books to read. Assignments to send. Tutorials to attend. Instructors to meet. Friends to discuss with. Library to do research. But, the uniqueness of learning at UNITAR lies in its total e-learning experience.

The students engage in a learning process that is technology savvy, flexible, multimedia enhanced, collaborative, self-driven, self-motivated and independent (UNITAR's Web site).

Study Setting

The objective of this study was to gain an insight into how the virtual teams of students actually worked and to learn from their experiences as to how such teams can work more effectively. The study was conducted on a group of 23 students registered for the course "Managerial Leadership" at MBA level. The students registered for this course came from different geographical locations as diverse as Johor, Penang, Sabah, Ipoh, Kedah, and Kuala Lumpur and they are all working people. The classes are conducted online by using CENTRA software. Along with the online classes, students come to meet their instructor on week-ends for a face-to-face interaction four times in a semester. Necessary assignments were designed and teams created for the purpose of the study.

There were 23 students in the class. They were constituted on a random basis in the groups of 3 each at the time of their first meeting with the instructor. Thus 5 groups had 3 members each while 2 groups had 4 members each. They were asked to develop their own work processes for the purpose of three assignments given to them. The teams were left totally unstructured for the purpose of developing their own work processes.

Assignments

Each team was supposed to handle three assignments. These assignments constituted 40 percent of their total marks for the final examination. The details of the assignments were as follows:

Assignment 1

Each team was asked to identify any six articles published in magazines/journals on the broad theme of managerial leadership. Each team member was supposed to read all those six articles and then collectively decide which one of these articles is the best in terms of its general appeal, fluency, language, and relevance to the course outline. Each group was given 15 minutes time to present their best article during one of the face to face meeting. The objective of this assignment was to familiarize them with some magazines/journals that normally publish articles on leadership, search the web, encourage them to read at least six articles on the subject, and experience the effects of leadership style in choosing the best article. The assignment had a 15 percent weight in the overall marks for their final examination.

Assignment 2

Each team was asked to come up with a model question paper for their final examination. The team was supposed to design a question paper as it could be in their final examination. The quality of the question paper was to be judged based on the quality of questions, their spread over the course, adequacy of number of questions to be answered in 3 hours, language, and relevance.

The objective of this assignment was to know the expectations of the students from the final examination, familiarize them with the course content, and motivate them to read the text and other reference material for working on this assignment. The assignment was worth 10 percent of the total marks.

Assignment 3

Each team was asked to identify any 3 inspirational books on the subject of managerial leadership. The book was supposed to be one that had a mass appeal, e.g., it could be Principle Centered Leadership by Stephen Covey, Talking straight by Iacocca, or How to Win Friends and Influence People by dale Carnegie. The team was then asked to identify the book that it found to be most inspirational. Each team was asked to make a 20-25 minute presentation based on the most inspirational book identified by the group.

The objective of the assignment was to motivate them to study inspirational books on the subject of managerial leadership and benefit the whole class by making them know the

main contents of the book through their presentation in the class. The assignment was worth 15 percent of the total marks for the final examination.

Note: It was announced that each assignment shall be evaluated for its quality by the instructor comprising 67 percent of the total weightage and the remaining 33 percent shall be based on the average of each team member's self evaluation and the peer evaluation.

Support System

In order to facilitate communication among team members, an event with the name "Meeting" was created on the CENTRA. CENTRA is the software that is being used by UNITAR to deliver the online lectures. The software allows two way verbal communication between the instructor and the students and also among students. The leader of the event controls the flow of communication (Centra Web site). This facilitates online chatting and verbal communication on one to one or one to many basis among members of a team on a designated day and time. The leader for the event was the instructor. With a prior notice the leader could grant the right to any student to lead the event. Besides, the students had the facility of using university's server for exchanging e-mails. Group e-mails are also created to send message to all the students. Any e-mail to be sent to any specific student or team could be sent to the instructor who could forward the message to the designated student. Almost all the students had internet facility either at their home or office.

Work Processes

Each team developed its own work processes in order to work on these three assignments. Based on the report submitted by each team, following observations could be made:

- Each team elected one of its members to lead the team for these assignments. Three teams decided to rotate leadership across three assignments, i.e., they decided to have one leader each for three assignments. The rationale of these teams was to let every member have the experience of leading the team.
- The choice of the leader was based on the willingness of a member to devote time for this purpose. The choice of a leader was much easier for the groups who decided to rotate leadership. In these groups the choice of the leader was made on the basis of considering specific interest of the member of the team.
- Members of each team exchanged their phone numbers and e-mails with each other to communicate and fax number to exchange notes, reference materials, articles etc.
- Four teams decided that a copy of e-mail sent to a member of the team should be compulsorily sent to other team members as well as to the instructor.
- Two teams decided that each e-mail shall be compulsorily acknowledged within 24 hours and in any case not later than 48 hours. These teams also decided that a member of a team should inform other members in advance about the duration for which he/she will not be available for on-line chat or during when he/she will not be able to access his/her mails. As one of the team member mentioned, "Sending an e-mail does not guarantee a response, and it can be nerve wrecking when you do not get a response after 4 reminders."

- All the teams developed a specific schedule/working plan based on the timeline for each assignment.
- One of the team decided that the leader would communicate with its members at least once daily. Even if there is nothing to communicate, the leader will send a mail simply saying 'hello.'
- Members of the one of the teams decided that in all their communication they would never criticize the ideas of other members. They decided that they would encourage and support the ideas and efforts of others. They further decided to help each other by offering assistance. One member of this team pointed out, " As we do not meet frequently, the language and words used in our emails is of critical importance. In most of our communication, we tried our best to keep things positive and convey criticism in a constructive manner. We also do acknowledge each other's effort especially when assignment lead is able to respond to urgency concerns. We do use expressions like " This is not to criticize ..." Prior to providing our inputs."

Findings

Each student was asked to submit a report to the instructor at the end of the semester indicating their assessment of cooperation among members, intensity of conflict, reasons for such conflicts, methodology used to resolve such conflicts, degree of trust among members, problems faced working in a virtual mode and specific lessons learned. Major findings based on these reports are:

- There was a strong reaction when team groupings formed on random basis were announced to the students. They wanted to choose their own members for the team. However, when told by the instructor that in real world they can not choose the group they have to lead, they accepted the groupings. One of the students mentioned in his report, "To share my thoughts on this experience would not be complete if I do not mention mutual respect. In all honesty, I think all four of us would have preferred having team members whom we knew or perceived to be "good". Having members "thrown in" created a mindset of serious doubt and hypocrisy. And this is the utmost obstacle for me - to get over my own hypocrisy and work together with mutual respect. The experience learnt is priceless. In the corporate world, you can remove people you "doubt" under your management. Here you had no such choice. With Dr. Jain's cynical comments of we cannot choose who we lead, i.e., we don't have a choice and cannot change team members, forced me to re-examine my methods and mindset. By the 3rd assignment, I would say I have had a valuable lesson."
- The teams that decided to rotate leadership across three assignments reported better cooperation among members. As one of the students from one team reported, "I always wanted to cooperate with other members of my team because I knew that if I will not, they will not cooperate me in the assignment that I was supposed to lead."
- The teams who used CENTRA on regular basis reported no problems with regard to communication. Some teams used Yahoo chat. These teams reported that chatting using text is considerably ineffective. The general opinion was, "We cannot type fast enough to ensure the team members got the right message. The problem was more prominent for team members who naturally not a good typist. It also caused confusion to team members

because of this delay." One student mentioned, "We generally did not try to use voice and video conferencing which I believe can actually add more values on the effectiveness of the virtual communication. The Yahoo conference that used text only sometime was very inconvenient because of lack of facial expression and true feeling during communication. In other words, our discussion was considerably lacking of empathy among each other in the group."

- The teams who decided to send a copy of their e-mail to the instructor reported greater pressure to respond in time, adhere to deadlines, and to be careful in their language.
- All the teams reported that they put in their best efforts and finished all the assignments in time because of a clear mission in front of them "Getting good marks." A virtual team needs a clear mission. That is a major point of virtual teams, by Jessica Lipnack and Jeffrey Stamps (1997), a book that shows managers how to create and maintain effective work relationships among geographically dispersed people.
- The team that decided that the leader would communicate with its members at least once daily reported building up strong relationship among members. It goes well with Wardell's (1998) thinking, "Once a project is underway, the manager has to keep team members from becoming isolated. You need to touch the virtual team every day."
- In both the teams in which there were four members each reported difficulty in choosing the leader. These teams reported frequent conflicts and the leader reported lesser support and cooperation from members. This was evident in peer evaluation. They gave low marks to each other.
- The degree of trust reported was highest in the team that decided that they would not criticize the ideas and opinions of others.
- All the teams reported that 3/4 face to face meetings were very helpful in removing their doubts and confusion, for resolving the conflicts, if any, and for sharing some of the resources (for example, exchange of a book) which could not be done otherwise. As observed by Suzanne Gaspar (2001) "While technology enables communication, there's still a need to meet face-to-face for important meetings. Having a four- to five-hour discussion is hard to do by phone, especially where you need to read body language."
- The team members belonging to teams that did not decide to acknowledge mails reported a degree of vacuum when they did not find a reply within a reasonable time. This was found to be one of the reasons of conflict among them.
- One of the most prominent reasons for the conflict was not being sensitive in the use of language.
- Some of the members of those teams who did not use CENTRA and mostly relied on chat facility reported problems because of not being very fast in typing. One of the students observed, " Chatting using text is considerably ineffective because we cannot type fast enough to ensure the team members got the right message. The problem was more prominent for team members who naturally not a good typist including myself. It also caused confusion to team members because of this delay."

Benefits Reported

Some of the benefits of working in a virtual team in students' own language are reproduced here:

- 1. "Working in a virtual team has taught me to be more considerate of other people's feelings and respect their opinions and ideas. Consideration and being thoughtful is vital for the purpose of preserving the integrity of the group. Additionally, working in a team can be more productive and the quality of the work produced can be substantially higher than we are working alone by ourselves. This is extremely true when the assignments given require much deliberation, preparation, thorough analysis and when working on the assignments single-handedly is very dexterous and tiresome."
- 2. As the accidental leader placed in this awkward position, and not without her own "sins" (in carrying out assigned tasks or meeting deadlines), I find this experience an education. Through it all, I have learnt the fine art of trust and letting go, of believing in my team members and their commitment to deliver when they say they will (instead of stressing me out and rushing in to do the work myself, ala office environment). As we move along the different assignments, I realized the role of being a conduit, bridging the members and facilitating the "production" of our work. We then found that each member has his and her own strengths, our specialties. "
- 3. "To all future MBA coursework, I suggest the school designs assignments to be worked in virtual teams. The lesson learnt is better than any MBA textbook."
- 4. "All of us were married and understandably we have so much commitment at home such as our kids and family. Therefore, by having CENTRA and e-mail, we were able to communicate conveniently without neglecting our responsibility to our kids and family such as playing with our kids, going to market, watching TV with family etc."
- 5. "I believe that the main advantage of Yahoo chat or e-mail is that we were able to bring very concise facts and points during our discussion as this is the very nature of the virtual communication. We seldom digressed to unnecessary issues because the internet connection time is basically precious and our reply was normally checked and reviewed carefully by all team members involved which is considered relatively different from the conventional physical discussion."
- 6. "Since we met our team members almost every alternate day on CENTRA, it appeared to me as if I was in a traditional class room where you meet other students frequently. Our discussion was more relaxed as there was no instructor present, though the instructor could come and join us any time."
- 7. "Since we all are working and have different free time, we were able to access the group materials at our own daily free time. I found this to be very convenient."
- 8. "The virtual mode allowed us to be in touch till the last moment with one of our lady team member who was at an advanced stage of her pregnancy. She could provide her inputs till the last moment. It was just wonderful."

Approach for Future

Based on the experience with this batch of students, the approach can be fine-tuned to make it more effective for the future virtual teams. Specific lessons are:

- 1. The number of assignments/projects should match the number of students in a virtual team. This provides an opportunity to each member of the team to lead one assignment/project.
- 2. They shall be informed about the basic requirements- respecting and helping each other, willingness to share resources, and the need for active participation- of working successfully in a team.
- 3. They must be asked to be very sensitive in their language. They must understand that to conduct a healthy critique session over emails can lead to bruised egos as the written word void of any emotional/ physical expressions can be truly misleading. These discussions may end abruptly by members who just give up after being misunderstood or simply "don't care". It can be hard to hear a cry for help from a virtual team member. The members of such virtual teams should develop a habit of asking other members their comfort level by asking things like 'Are you OK with that' when they agree to something.
- 4. They must be informed that the conflicts are natural in teams. What is necessary is to nip it in the bud. Says Wardell (1998), "If you have an e-mail archive, check it daily for disagreements among team members. If you find any, call them in person. A voice works better than e-mail."
- 5. Although I still prefer the teams to develop their own work processes, I would like to give the following as guidelines:
 - a) They should prefer using CENTRA over Yahoo chat etc. This will do away with the need to type their message.
 - b) They should prefer sending a copy of their e-mail to the instructor. No follow up should be expected from the instructor unless specifically desired.
 - c) They should prefer acknowledging e-mail message even though it does not require any specific reply. For example, if one of the members of the team sends an article, the recipient should send a mail stating just one word 'received'.
 - d) They should keep sufficient mail storage quota in their e-mail account. Particularly, they should transfer all the attachments to their local drive to keep storage free for incoming mails.
 - e) The duration for which a particular member shall be away and not available for communication, shall be informed to other members in advance.
 - f) They must be asked to develop 'can do' attitude in carrying out the virtual communication as sometimes it can be very frustrating in the beginning due to wrong set up, lack of knowledge and training, inadequate support system etc.

Conclusion

The limitation of e-learning educational model that it lacks human touch can be overcome by using the concept of virtual teams of students. Necessary assignments/projects need to be designed for this purpose. By developing right work processes the success of such teams can be ensured. The experience gained by students can prove valuable to them in their corporate environment. By using the concept of virtual teams at he university level, the universities can act as a training ground for their students who will find it much convenient at a later stage in their career if they have to work in this mode.

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