



Communications and Trust Is a Key Factor to Success in Virtual Teams Collaborations

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ABSTRACT

Communication and trust plays an important role in virtual team working nowadays. It is because virtual team's members come from different culture around the world. We know that, different cultures implant different behavior, value and norms. This article will study about the importance of communication and trust element in virtual team working. This article will divided into two parts which are communication and trust in virtual teams. Trust in virtual teams will focus on three type includes impersonal, abstract trust relationships and personal trust relationships. Swift trust and how to build it is also discussed to provide information about virtual teams to promote better understanding. This article provides information for organizations or manager that chooses virtual teams in undertaking their international business or assignment.

Keywords: Cross culture management, trust, virtual team, swift trust.

1. INTRODUCTION

Virtual teams are defined as group of people from different places, culture, time zone and work method that work together using technologies to communicate and meet each other virtually. Johnson, Heimann and O' Neil (2001) defined virtual teams as groups of people who collaborate closely even though they may or may not be separated by space, time and organizational barriers. Hunsker and J. Hunsaker (2008) defined virtual teams as groups of geographically and/or organizationally dispersed co-workers that are assembled using a combination of telecommunications and information's technologies to accomplish an organizational task.

Normally, virtual teams are much related to some words that give real means such as communicate through technologies, meet virtually using technologies medium, people who are from different culture and time zone. Organization chooses this method undertaking their international assignment to cut cost and time. Virtual team's collaborations become very important methods today in encouraging international business activities. For those who have difficulties to

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interact in face-to-face communication, this approach gives some opportunity to take part in international business work. Apart from that, people could learn to work with other people around the world without a need to travel abroad. We could understand others' culture characteristics through virtual teams because normally communication styles, methods of work and leadership's style in virtual team working are different from one country compared to another country. Indirectly, it's give some basic information of others culture and that's the way we recognize characteristic of foreign cultures.

Apart from that, virtual teams also have several differences compared to conventional team. Table 1 describes the comparison between virtual teams and conventional teams. The comparison shows that communications and the method of communications is an important factor to induce understanding. It also proves that clear communications play an important role to virtual and conventional teams to be successful.

Table 1: Adapted from Hunsaker and J. Hunsaker, 2008

	VIRTUAL TEAMS	CONVENTIONAL TEAMS
Spatial distance Communication	Distributed Technologically Mediated	Proximal Face to Face

From the Table 1, in summary, virtual teams are more to cross boundaries of space and conventional teams in close proximizing to one another when communicate. The members in virtual teams are located geographically distant and meet virtually using technology medium. Virtual teams' members are using technologies such as video conferencing and e-mail to interact and communicate to each other. Conventional teams use face-to-face communication style to interact among them. Whatever medium used to communicate by both team members, the important issue is that communication is the first stage in building trust continuously in relationship among them.

2. COMMUNICATIONS IN VIRTUAL TEAMS

Communication is one of important elements in virtual teams because team members are comprise of different national cultures. Group behavior and communications styles usually are differ between one countries compared to another. Communication also not only talks about 'when' and 'what' but 'how' to communicate among members. Johnson, Heimann and O' Neil (2001) said that in virtual world, the old adage: You never get a second chance to make a

first impression', rings truer than ever. All team members should be concerned and be very careful with their first sentences in communication for the reason that it will build trust or cause barriers in communications. Ferraro (1998) divided communications to two ways which are (1) through language (using words that have mutually understood meanings and are linked together into sentences according to consistently followed rules) and (2) through nonverbal communication or silent language. Virtual teams' members use technology to communicate with each other. Usually they will use tools such as chat rooms, voice mail, computer-mediated conferencing (CMC), fax, e-mail, video conferencing, telephone conference, online system and communication software. Only talented people should be chosen to manage a virtual team's assignment. They are characterized as people who possess good verbal, listening, writing skills and superior skills in using communication technology. Successful communication and daily communications helps all members keep on track especially between manager and team members. Manager must have a good skill and strong leadership to allocate clear information to team members. A successful communication means team members in virtual teams understand messages conveyed by the.

Combination between technology tool and superior skill to use the technology tool as a medium of communication in virtual team assignment is very important. Virtual teams cannot be set up or exist today without the advanced and high-tech technological tools. Bergiel, J.Bergiel and Balsmeier (2008) said that this platform (website) a convenient space to store and distribute graphic materials, schedules, flowcharts, reference materials and much more. Text only communications is appropriate for mundane communication although it never substitute for higher-level communication that requires graphics or images. Communications becomes serious issue in virtual team's task because of two main factors namely language and multiple zone face-to-face interactions.

Language

Language also a serious factor in communications among virtual teams members. Even the members have a very good skill in term of language, the communication style still differ from one country to another country. High context nations such as Japan and Malaysia more too polite, high power distance, relationships oriented and applied give face culture in their communication style. Besides, Western countries such as United States more on individualistic, low power distance, task oriented and direct communications style. Gamsrieg (2005) said that high context communication systems are the extreme opposite of flow context communication systems. The issue that stressed here is that all teams member must understand the communication style and culture of each member that involve in their virtual work. Fail to understand others members culture can cause communication barriers among members. Johnson, Heimann and O' Neil

(2001) list three communication barriers that exist in virtual team's communications:

- i) Lack of project visibility means members were unclear on the tasks they were required to do and they were vague on how their tasks fit in to the project as a whole.
- ii) Getting in touch with people means members would send out questions and would never get back a response.
- iii) Constraints in technology means had difficulty in determining the meaning of text-based messages such as e-mails, especially if the person was attempting to be sarcastic.

Apart from that, communications are important in determining whether the virtual teams are successful especially in term of time difference and face-to-face meeting or contact. Time difference exists because members are from different zone time of country such as Malaysia at 9.00 pm but United Kingdom at 4.00 a.m. The differences in time zones need a good time plan by managers to ensure and enable all members could attend the meeting virtually. Face-to-face communication is also important. This communication style could be implemented using video conferencing. Members can see other members' faces and gestures and it can build trust among them. Working as a team with multi-cultural members is difficult enough, but it becomes much more once the complexities of time, distance, expense, etc., are added to the task of global executives who cannot meet face-to-face (Kiely, 2001). In the other hand, language is one of the elements that should be seriously stressed by members because they are differences in national culture. Oerting and Buerger (2006) said that language is important and all members should pay attention to the pace of speech, slang and different accents. Some words such as 'yes' not exactly means agree. For example, in Japanese culture, the words 'yes' means they will think about the issue discussed or means disagree at all.

Brake (2006) said that in applying cultural intelligence, one need to ensure to communicate respects for all the differences in teams, provide opportunities for all the team members to dialogue about the differences and learn from one another (particularly how differences might manifest themselves in virtual setting). One also need to support the teams by facilitating the development of a cultural infrastructure of shared rooms and conventions (operating agreements). Apart from that, Brake (2006) also list three important things when communicating context namely:

- i) Challenge your own assumptions about what is 'nice to know' versus 'need to know'.
- ii) Put you in the position of other people on the team – what are their individual realities and current levels of understanding about the project, the team, the organization, etc?

- iii) Use the right technology for the right purpose. Email, for example, is often good for communicating facts, but not for communicating some of the meaning associated with those facts, example which you feel resonate must with you and your situation.

Commonality of language is identified as an important issue. The most effective communications required accuracy, precision and simplicity to avoid ambiguity and misunderstanding (Kelly, Crossman and Cannings, 2004). Virtual team's members must understand that there is no short cut to success in virtual team working. If all members want to communicate effectively, they must learn a language that used in virtual teams working. Moreover, there are close relationship between language and culture. Ferraro (1998) said that in all language points of cultural emphasis are directly reflected in the size and specialization of the vocabularies. In other words, a language will contain a greater number of terms, more synonyms, and more fine distinctions when referring to features of cultural emphasis. Apart from that, language also mirrors to values of cultural. For examples, United States (US) people start from the cultural assumption that the individual is supreme and not only can, but should, shape his or her own destiny (Ferraro, 1998). From the sentence, we can see that US people more individualistic culture and usually low context culture such as US more task oriented compare to low contact culture. All teams members must adapt and flexible in accept others members culture.

The conclusion is communication is very important to determine virtual teamwork successful. The goal of virtual works could not be achieved without smooth communication. Ton Van Der Smagt (2000); Newcombe (1996) said that an improvement in relationships between the parties is likely to improve communications more effectively than any changes in communication techniques. In summary, communication plays an important role in successful virtual team's assignment. A good communication will build trust among team members. The more important thing is all members must understand and learn how to communicate each other's. Failed to identify the right way to communicate will cause failure in virtual team's communications. All teams' members must understand that language is a symbolic of systems and have its own linguistic diversity on the earth. Clear communication by expert in virtual teams collaborations can helps members from high context such as China build swift trust especially in short term virtual working.

Trust in Virtual Teams

Trust is the most important elements in virtual team working. Trust is the key factor to determine successful collaborations in virtual teams. Actually, it is difficult to give the exact meaning of trust because various definition are given. If we want dialogue to be a serious option for organizational communication and at the same time know that organizational form is an important determinant of trust,

it makes sense to take a closer look at organizational form. Lack of trust can be assumed as a barrier to members especially to encourage them doing the right thing in their jobs. Trust was composed of several elements: (a) a sense of trust that individuals would do what they aid within the designated time frame; (b) trust in the accurateness of the information provided by the other team members; (c) trust that team members would give honest and constructive feedback on ideas, thoughts, and creative efforts shared electronically; (d) trust in one another's expertise and ability to do the work effectively; and (e) trust that the other team members would hold ideas shared in confidence if requested (Nemiro, 2000). The elements that should be stressed in building trust are sincere and appropriate. Sincere and appropriate in virtual team working help build trust and enhance better communication. Usually, the more trust among team members the more information sharing and exchange among them. Exchange information can encourage team members doing the right way especially to achieve their objective in develop virtual teams collaborations.

High level of trust and sincere among team members makes them comfortable in working together. Their collaborations become more effective. Holton (2001) said that, trust develops through frequent and meaningful interaction, where individual learns to feel comfortable and open in sharing their individual insight and concerns, where ideas and assumptions can be challenged without fear or risk of repercussion and where diversity of opinion is valued over commonality or compliance. On the other hand, without trust, goal and objective of virtual teams cannot be achieved. Kelly, Crossman and Cannings (2004) explain that the building of interpersonal and intra organizational trust and commitment was considered as an important component in the storming and norming stages of the teams, development, without mutual trust being establish reciprocal commitment would not be achieved. In developing trust face to face interactions are still important. Face to face interactions can also create confidence in virtual team working. Once members can build trust, they can work effectively and successfully. There are two type of trust that will be discusse in these sub topics namely Impersonal, Abstract Trust Relationships and Personal Trust Relationships.

Impersonal, Abstract Trust Relationships

Impersonal and abstract trust relationship pattern of trust normally applied in short-term team working. Trust exists in this pattern through previous successful interactions especially in institutional context. Nandhakumar and Backerville (2006) provide information that in the short term most of teams were able to be activated and operational in the company context, even in the absence of personal relationships, because these teams relied on previously successful interactions, which are sediment and embedded in the institutional context, as impersonal or abstract trust relations. Apart from that, they are several factors that can build trust among members in short term virtual collaborations such as:

- i) Confidence in existence of social orders and routines.
- ii) Confidence in legitimacy of power relations and hierarchical order.
- iii) Confidence in the working of the expert knowledge.

Usually trust built in this pattern because all members are confidence and believe that advice given by expert is the most important thing to complete their task. Experts identified as a person that have better knowledge and extra skill in whatever task that they want to complete. Such impersonal and, abstract trust relationships enable temporary team working with experts as and when needed to solve specifics problems (Nandhakumar and Baskerville, 2006). Besides, short-term team working in virtual teams also can create swift trust. Swift trust happens or can be built because teams' members need to decide and make the decision when action is more stressed. The idea of abstract trust shares many attributes with the concept of swift trust. We know that, it is difficult to build trust among people in high context culture especially in short-term team working. However, expert that have extra skill and superior experience in doing virtual teams works can influence level of trust among members from high context culture. In building trust especially swift trust Brake, (2006) list five important factors that should be considered by all team members:

- i) Communicate openly and frequently.
- ii) Make your actions as transparent as possible.
- iii) Be accessible and responsive.
- iv) Keep everyone informed.
- v) Do what you say you will do, be consistent and predictable.

Personal Trust Relationships

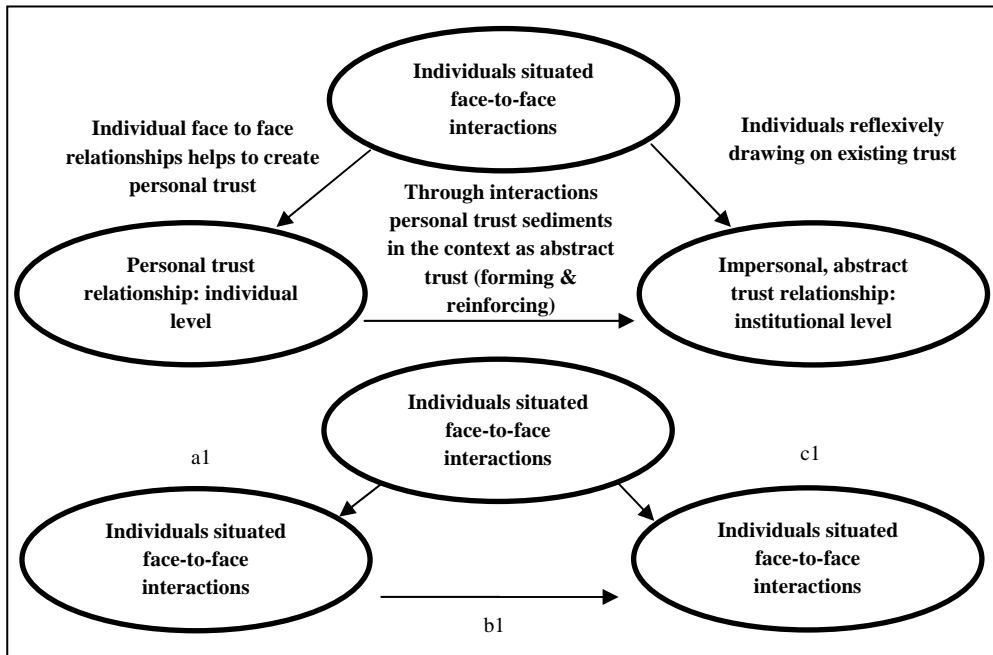
Personal trust relationship pattern of trust explains that it exist in long-term virtual team working. The key words or the most important part in personal trust relationships is that the trust starts to be built by face-to-face meeting. There will be none of the virtual teams work without face-to-face interactions. Body language or non-verbal communications are very important in long-term team working. It includes whether through face-to-face interactions or video conferencing. Gesture plays an important role in identifying team members' attentions and their interest in the topics discuss in virtual teams meeting. Technology alone could not develop trust because personal trust relationships needs physical context to know each other's. Nandhakumar and Baskerville (2006) explained that the team members saw such face-to-face involvement as helping to develop attitudes towards the other as a trust worthy party. This described that physical context are needed in long-term virtual teams. Without face-to-face meets, virtual teams will not work. Both culture (High Context and Low Context) agree that without face-to-face interactions, people in virtual teams face difficulty in building trust. No matter whatever reasons are given in building

personal trust relationship, there is still a need to meet each other once or twice a year. Face-to-face interactions can gain the level of trust among members in long-terms virtual collaborations.

Technology enables members to know each other in limited ways. They will begin the relationship with send pictures and first greeting to their members in virtual organizational but as we know that is the eye contact plays important roles in non-verbal communications. Technology that are used today still not enable non-verbal communication especially eye contact applied by members. Only some gestures that can be seen through video conferencing. Nandhakumar and Baskerville (2006) said that personal trust and commitment based on personal relationship, face-to-face contacts and familiarity. Most of manager thinks that their office contact is the best place to build personal trust. This is because normally people socializing each other at office. Moreover, this socializing encourage people to communicate face to face every day. Face to face communication can help to build personal trust through contribute strong confidence on bodies language especially face expression. Face-to-face communication also helps members improved through shared experiences and information exchanges. Nandhakumar and Baskerville (2006) explained that personal trust relationships need to be actively built by individuals opening out to others in an organizational context and by access to backstage activities.

Medium, that most suitable in establishing personal trust is, by using video conferencing allows members to monitor each member's movement, face and gesture in their virtual meeting. Table 2 illustrates how personal trust relationship can be developed. This table also helps to explain and discuss the information about personal trust relationships development for better understanding:

Table 2: Adapted from Nandhakumar and Baskerville (2006)



However, face-to-face interactions still play an important role in personal trust because technology such as computer does not allow members to share their feelings and informal knowledge. Moreover, limitations of technologies such as social limit (hierarchical relations) and practical limits (time zone) also do not allow members to share their feeling through computer system. Personal trust relationships can be developed and based on personal relationships, face-to-face contacts and familiarity.

3. IMPLICATIONS AND CONCLUSION

There are strong relation between communications and trust in determining virtual teams' success. This section will describe and discuss the implications of communications and trust in virtual workplace. Success in communication and in building trust among members is a key factor to make sure all vision, mission and objective of virtual team work can be achieved. Apart from that, clear communications and high trust in virtual teams works will makes all members satisfied and happy to work together. To makes better understand about this section, discussion will divided in to two subtopics namely communications and trust implications in virtual teams.

Communication Implications in Virtual Teams Collaborations

Communication is very important in virtual teams' works especially in determining goal and objective that can be achieved. Many research show that lower quality of communication in virtual teams will cause dissatisfaction among members. This situation are not healthy in virtual teams collaboration because can cause failure in achieving goal of virtual teams. Akkirman and Harris (2005) discuss that employees in a virtual workplace experienced lower levels of job stress, all correlated with lower quality communication. Normally, members that are poor in communication have relation with lower commitment on their works. The problem will increase once they are working together because usually, workers that are low level in communication and commitment to their works, will be lower in productivity. We know that, lower in productivity will cause employee not interested in their task. Akkirman and Harris (2005), listed five steps to make sure communications successful and all teams satisfied in communications namely:

- i) Establishing information technology and network infrastructure and providing ongoing training.
- ii) The organization changed its organizational structure to form a process-based organization that allowed employees to take an entire process from start to finish one rapid flow.
- iii) The organization adopted managing by results.
- iv) Created a paperless organization which stored information in digital format allowing all workers to access the most updated information from anywhere and anytime
- v) Organization created virtual office, where 65% of their workforce moved out of office and into their own virtual workplace.

The facilities of information technology and role of organization in providing their virtual worker knowledge about the technology help all workers become more effective and productive. Clear communications also can be achieved by using technology facilitate now days. A good medium in communication can help members exchange information well. Indirectly, it also will affect the virtual team's performance. Example of technology hardware that is created to help members in communications is voice-over internet protocol (VOIP), virtual private networks (VDNs) and internet. Apart from that, several computer-based communications system also created to improve and increase productivity of virtual teams working communication such as computer mediated communication systems (CMCS). Beranek and Martz (2005) said that variations of this system are used in industry to support the basic meeting and task functions found in remote or virtual teamwork and in some cases, variants of the systems are being used increasingly in academia to support the use of teams in online classes. The better technology provided by organization to their virtual team worker the better groups can work together.

Learn about the main language used in virtual team works is important. Some words have different meaning from one culture to another culture. For examples the words “yes’ in Japanese culture that discuss earlier in this paper, proof that in the low context culture they more polite and not straight forward if they not agree. It is because most low context culture was applied face saving culture in their country. It also relates to relationship oriented in team working compare to high context that more on task oriented. According to Ferraro (1998) the goal of communication in Japan is to consensus and promote harmony, while in the United States it is to demonstrate one’s eloquence, language in Japan tends to be cooperative, polite and conciliatory, language in United State is often competitive, adversarial, confrontational and aimed at making a point. However, the most important thing is virtual workers must have follow training in using virtual teams technology. It can provid better information and superior skill in virtual collaborations. Stanley Stough, Sean Eom and James Buskenmyer (2000), have listed three groupware for facilitating communications and enhance the innovative use of teams as below:

Table 3: Adapted from Stough, Eom and Buckenmyer (2000)

Medium	Explanations
Electronic-mail (e-mail)	<ul style="list-style-type: none"> - Most successful form of person to person groupware. - Its capability has also become an essential element in many commercial groupware products.
Computer based conferencing systems	<ul style="list-style-type: none"> - Allow a workgroup to exchange views, ideas or - Information in a discussion to overcome the barriers created by time and space.
Collaborative utility programming / drawing	<ul style="list-style-type: none"> - Permit each member of workgroup to create and edit his or her sections of any document type including text, graphics, and spreadsheets and so on.

From Table 3, team members have many choices to communicate each other virtually. However, the most important thing is skill using the technology that is used in virtual teams’ team working now days. All members must participate in technology training that are prepared by organizations. Research has shown that one of pitfalls in virtual teams is lack of knowledge using technology that are used to communicate in virtual teams members.

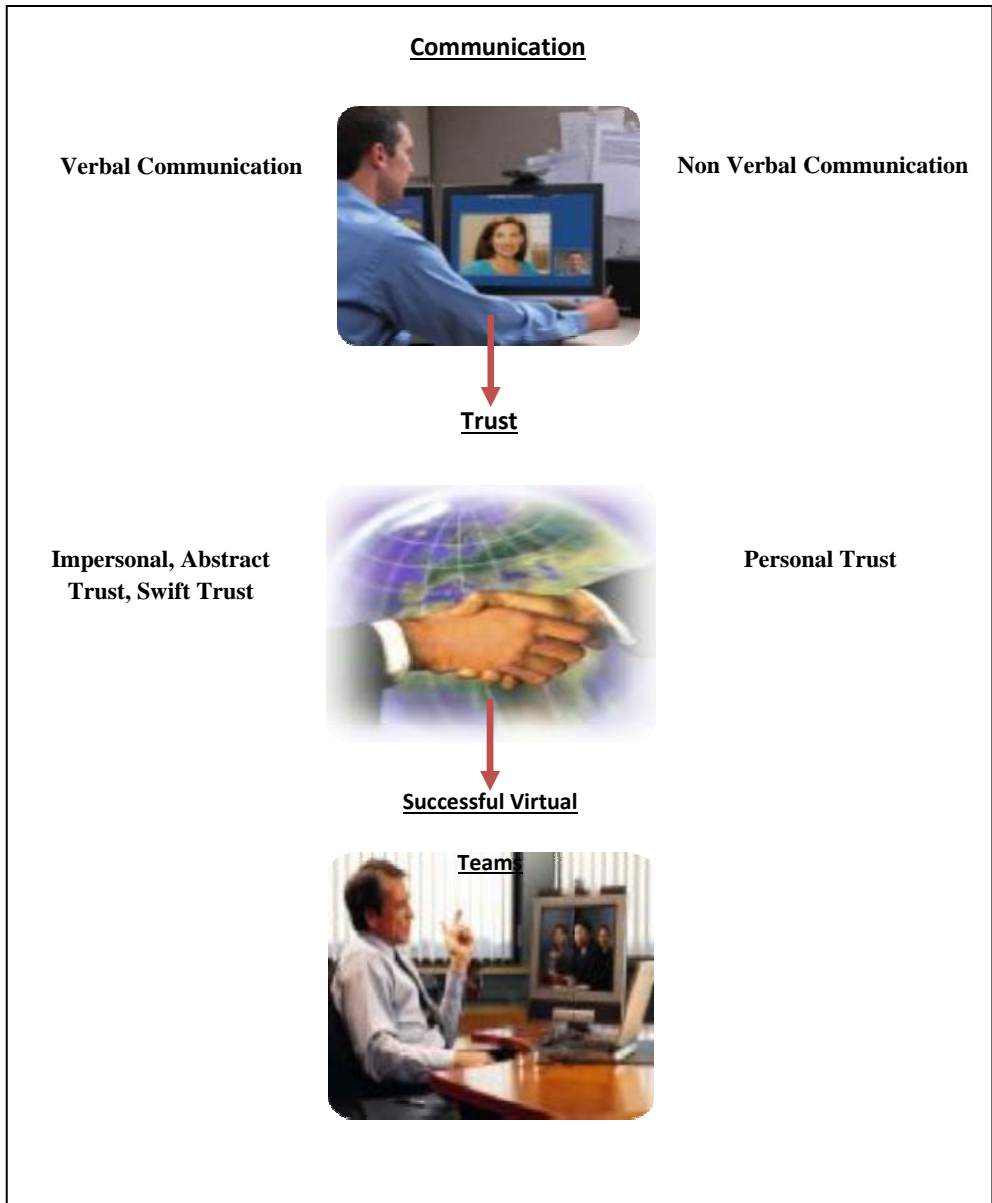
Trust Implications in Virtual Teams Works

Communications play important roles in building trust among all members. In building trust, only the technology is not enough. Moreover, trust has correlations

with relationships. Trust also helps to enhance communication and virtual teams' performance. The impersonal, abstract trust relationships and personal trust relationships exist because virtual team's works may be permanent and temporary. Face to face interactions very important in permanent and long virtual works. No team works without face-to-face interactions. Impersonal, abstract trust relationship and swift trust is the two type of trust in short-term virtual team working. Pateli and Duncan (2004) explained that swift trust could be strong and 'resilient' enough to survive the life of the temporary group since it center around the competent and faithful enactment of clear roles and members associated duties. Besides, personal trust exists in permanent or long-term virtual teams working. Face-to-face interaction important because members trust builds through this way. Verbal and non-verbal communications play important roles in face-to-face interactions. Language, face expression and gestures are the way in which members build trust. Confident verbal communication helps to build personal trust. Moreover, all knowledge or information that members used in communications described how far members alert with their virtual work. Indirectly, it can enhance confident to build trust in virtual teams working.

However, the most challenging in trust issue is how to build swift trust among members that come from high context culture. Trust only can build among them in long-term because they need time to trust people that work with them. Clear communication by expert in virtual teams is a solution to this problem. Research results have proof that, members that do not have experience in virtual teams or come from high context culture can build swift trust from the explanation given by expert. Usually, expert will describe about the abstract of past successful of virtual teams working to build trust among them. In summary, clear communications helps a lot in build trust among members. Communications and trust very related each other as we can see on the table 4 above. First words whether verbal or writing using technology medium will determine the level of trust that can be built among them. Members that have difficulty in communications especially do not understand how to use correct language when communicate will cause failure in building trust in virtual teams works.

Table 4: Communications and trust that very related each other and final results is successful virtual teams



All members must alert and concern about correct words slang and words pronunciation when converse to each other. The more important thing to highlight is failed build trust in virtual teams will cause all objective and goal failed to achieved. Strong leadership in virtual teams must know, understand, and identify the way the members should communicate to each other and the type or

patterns of trust to be applied in their virtual teams working. This knowledge can be gained among members by giving them training about the technology system and correct methods that they should use in invisible collaboration of virtual teams. Pattern of trust also described as the communications styles that most suitable to be used. In personal trust (long-term team working), face-to-face interactions is the best way to applied. We must understand and keep in our mind that long-terms virtual teams collaborations really concern about face-to-face interactions. There are none of virtual teams working without face-to-face meeting. Impersonal, abstract trust relationship is more to short-term virtual team working. The issue in this pattern of trust is swift trust. We have discussed that about this earlier. Clear communication from expert about successful of virtual teams in the past helps to build trust among members from high context culture. It does not have any problem to low context culture people in build swift trust because they are task oriented people but the challenges is to relationships oriented people that takes times to trust and very concern about the relationships when working together. The results are successful of virtual team working in both situations namely long-term and short-term virtual team's collaborations.

REFERENCES

- Ali D. Akkirman and Drew L. Harris. (2005). Organizational communication satisfaction in the virtual workplace. *Journal of Management Development*, Vol. 24(5), 397-409.
- Angela Gamsriegler. (2005). Differences in high-context and low-context communication style across cultures influence the way people perceive information and knowledge management, *issues2-art20*, seminar paper, pp1-10.
- Balise J. Bergiel, Erich B. Bergiel and Phillip W. Balsmeier. (2008). Nature of virtual teams: a summary of their advantages and disadvantages. *Management Research News*, Vol. 31(2), 99-110.
- Gary P. Ferraro. (1998). *The Cultural Dimension of International Business*. 3rd Edition, Prentice-Hall, Inc. Simon & Schuster/A Viacom Company Upper Saddle River, New Jersey 07458.
- Jill E. Nemiro. (2000). The climate for creativity in virtual teams. *Advances in Interdisciplinary Studies of Work Teams*, Volume 7, Emerald Group Publishing Limited, pp. 79-114.
- Judith A. Holton. (2001). Building trust and collaboration in a virtual team. *Team Performance Management: An International Journal*, Vol. 7(¾), 36-47.

- Joe Nandhakumar and Richard Baskerville. (2006). Durability of online team working: patterns of trust. *Information Technology & People*, Vol. 19(4), 371-389.
- Laree S. Kiely. (2001). Overcoming time and distance: International virtual executive teams. *Advances in Global Leadership Volume 2*, Emerald Group Publishing Limited, pp. 185-216.
- Liz Lee-Kelly, Alf Crossman and Anne Cannings. (2004). A social interaction approach to managing the 'invisible' of virtual teams. *Industrial Management & Data Systems*, Vol. 104(8), 650-657.
- Margaret Oerting and Thomas Buergi. (2006). The challenges of managing cross-cultural virtual project teams. *Team Performance Management*, Vol. 12(1/2), 23-30.
- Niki Panteli and Elizabeth. (2004). Trust and temporary virtual teams: alternative explanations and dramaturgical relationships. *Information Technology & People*, Vol. 17(4), 423-441.
- Pamela Johnson, Virginia Heimann and Karen O'Neill. (2001). The 'wonderland' of virtual teams. *Journal of Workplace Learning*, Vol. 13(1), 24-29.
- Peggy M. Beranek and Ben Martz. (2005). Making virtual teams more effective: improving relational links. *Team Performance Management*, Vol.11(5/6), 200-213.
- Phillip L. Hunsaker and Johanna S. Hunsaker. (2008). Virtual teams: a leader's guide. *Team Performance Management*, Vol. 14(1/2), 86-101.
- Stanley Stough, Sean Eom and James Buckenmyer. (2000). Virtual teaming: a strategy for moving your organization into the new millennium. *Industrial Management & Data Systems*, No. 100/8, 370-378.
- Terence Brake. (2005). Leading global virtual teams. *Industrial and Commercial Training*, Vol. 38(3), 116-121.
- Ton VanDer Smagt. (2000). Enhancing virtual teams: social relations v. communication technology. *Industrial Management & Data Systems*, No. 100/4, 148-156.