

# Inevitable vs. Evitable : An Attempt Identify the Appropriate Battleground for Virtual Teams

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**요약** 가상조직 구성원들간의 신뢰도가 비가상조직 구성원들간의 신뢰도 보다 떨어지므로 비가상조직이 가상조직 보다 효과적이라는 것이 전통적인 믿음이었다. 이러한 이유 때문에 가상조직은 비가상조직으로 풀어나가기 어려운 상황 (inevitable situation)에만 제한적으로 활용된다고 믿어왔다. 그러나, 비가상조직으로 해결할 수 있는 경우(evitable situation)에도 가상조직이 좀 더 효과적인 경우가 있을 것이라 믿는다. 이러한 관점에서 본 논문에서는 가상조직이 신뢰를 잃지 않고 가장 효과적으로 활용될 수 있는 상황을 제시하고자 한다.

**Abstract** A dominant idea is that because virtual members trust one another less than do the non-virtual and therefore the traditional face-to face teams are better than the virtual, the virtual team can be organized to cope with the inevitable, restrictive situation in which they cannot organize a team with face-to-face meetings. However, we believe that even if a manager coping with a certain problem can organize a face-to-face team (evitable situation), there might be some areas or cases in which organizing a virtual team is better than organizing a face-to-face team. This paper suggests it is important for practical managers to identify when(for which situations) the virtual teams are most suitable and can be successful without losing trust.

## 1. Introduction

The organizational geography of information age can be expected to become increasingly kinetic, filled with turbulence and change. We are moving from long-enduring to temporary forms, from permanence to transience. To cope with this flexible and global market, information technology has been adopted by organizations. Information technology can be a competitive weapon that change an industry's structure, alter key competitive forces, and affect a company's

choice of strategy. Companies are rethinking traditional organization models as the need to better utilize information resources and communicate more effectively in a global economy becomes more critical (Parsons 1983). Behind these changes lies computer-age information technology with its own management problems (Drucker 1988). It is also asserted that new organizational design variables such as virtual components and electronic communications are made possible through information technology (Applegate et al. 1996; Lucas & Baroudi 1994).

It is believed that the Internet enables organizations to meet those needs with regards to the new concept, virtual. Specifically, the virtual team as a kind of

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virtual organization, using information technology, has recently opened the way to overcome the limitations and solve the problems which traditional teams have had.

Although the virtual team is a new field into which many researchers are rushing, it can fail because of some factors (e.g., violation of operating logic (Miles & Snow 1992)). It is, of course, expected that these factors can be reduced and eliminated sooner or later ; i.e., Chidambaram (1996) has recently shown that computer-supported groups, given adequate time, will exchange enough social information to develop strong relational links. At present, how these factors affect the virtual teams should be considered by an organization that is attempting to organize its teams virtually. Further, How group defacilitators such as mistrust (Snell 1994)0 can be obvious challenge to management systems based on mistrust and control. This article is focusing on of those group facilitators, trust, which should be regarded as an important factor to be considered when a virtual team is organized.

## **II . Research Purpose**

Using information technology, organizations are becoming virtual to cope with the rapidly changing business environments such as e-business, short product life cycle, and an unforeseeable financial market. Gibbs and Keating(1995) mention that the signature of virtual corporation's new control environment increasingly will move toward automated controls and away from those that require manual intervention. There are a number of studies to show that virtual teams communicates less efficiently than face-to-face groups (McGrath & Hollingshead 1994; Hightower & Sayeed 1996). Moreover, trust still remains the question in that the information technology does nit guarantee that the remote members without face-to-face meetings can trust one another (even though video conferencing is implemented). Peters(1995) states that virtual and trust are the key ideas for

transforming business, and Posch (1994) mentions that as the world's information economy evolves, companies will have to be more aggressive about keeping the trust of their core customers. Coutu (1998) shows that trust can and does exist in virtual teams, but it develops in a very different way than in traditional teams. Handy (1995) proposes that seven rules of trust can help virtual organizations establish trust among the members, and he also says that virtual organizations are built on trust.

Although it is commonly accepted that the virtual is the trend which is inevitable in future business activities, a dominant idea is that the improvement of the trust level in the virtual organizations is, in fact, hard to implement. To practical managers, it is important when (for which situations) the virtual teams are most suitable and can be successful without organization is most suitable for managers without losing trust.

## **III . Going Virtual**

It has been also asserted that because of today's communications technology, the shift to the virtual office or organization seems inevitable or is becoming increasingly common (Berger 1996; Lally & Kostner 1997). It is also strongly asserted that there are also many companies that are trying to transform their organizational structure into virtual organizations in order to prepare them for the inevitable 21st century business environment. IBM AT&T, Travelers Corporation, Pacific Egl, Panasonic, J.C. Penny, Gerling Group, and SOFTTEK are among the firms embracing the virtual-office concept(Greengard 1994; Loebbeche & Jelassi 1997 ; Stephenson 1990).

Although it is asserted that a virtual team using network technology can reduce the incidence of failure, such teams have only recently been possible. Even in the late 1980's,

companies could organize information technology activities autonomously, but early applications were limited to transaction-oriented functions requiring only limited integration with the activities of other organizational groups (Blanton 1992). Today, however, information technology is not simply a tool to record transactions and process data. In short, although the idea of virtual organizations that exploit the capabilities of those new technology capabilities, such as the World Wide Web and high-speed network hardware and software, allow the development of new implementations of virtual organizations that exploit the capabilities of those new technologies. Stewart (1994) mentions that an organization becomes a different animal when network technology gets into its system. Add the executive claim three major benefits from working in a wired organization. The first is time and money saved. Second, networks provide easy links across functional boundaries, i.e., the old walls between departments. Working a wired company provides a third benefit, which is subtler and more profound: properly run, networks can help a company see its market more clearly. Specifically, Coyle and Sempert (1997) describes the case of the Human Resource Planning Society that its team performance through teleconferencing. Hamblen (1998) shows another example of Dow Chemical Co., which has reduced the number of trips and shortened by 15% the time it takes to edit and pass in conventional E-mail documents to other members of the team; and Melymuka (1997) describes a virtual team at ARCO Alaska using video, E-mail, and the World Wide Web. However, these researchers have been largely focusing only on the comparison between traditional and virtual teams and suggestion ways companies can utilize the virtual approach. At this time, the virtual team appears to be a most popular and effective organizational structure to achieve successful

business execution

### III. Inevitable Situation

The use of database knowledge query and manipulation languages, groupware, intranet, e-mail, World wide Web, and the Internet can provide a workable, and flexible base of system for creating the platforms for virtual teams, a kind of virtual organization. Today's companies have organized virtual teams using the three characteristics which can be added to the traditional team by organizing it virtually are as follows : (1) Transcendency-Virtual teams can transcend time and distance. Network technology can make the team members communicate with one another without regard to jet lag even in case they are scattered all over the world ; (2) Infinity - Virtual teams can have an infinite number of participants. Network technology enables the participants to share information on the task at one common place; and (3) Anonymity -- Because virtual teams enable the members to keep their participation anonymous, virtual teams can be designed to conceal the identities of those involved in the virtual team and even to conceal the existence of the team itself. It is believed that these characteristics can be used to significantly reduce the limitations and the problems of the traditional team. Until now, we have organized the virtual teams to cope with the following three situations, which are inevitable for a company to do today's business: (1) When the team members are physically dispersed; (2) When the number of participants must be minimized to reduce the cost of meetings; and (3) When friction between outsiders and regular members of the team is expected.

In fact, many cases of virtual organizations coping with the inevitable situations have been reported. In addressing the first inevitable situation,

Greengrad(1994) shows that new technologies and work attitudes are enabling an increasing number of people to work from homes, cars or virtually anywhere, and he also shows that the percentage of Fortune 500 firms that build work teams consisting of members at different sites increased from 44% in 1989 to 89% in 1994 . According to Lipnack and Stamps (1997), the NCR Corporation coping with the second inevitable situation assembles a virtual task team of more than 1,000 people working at 17 locations to develop a next-generation computer systems armed with high-speed telecommunication networks and information systems technologies. Cohen(1997) reported another case of a virtual team organized to develop training programs : virtual team members have an advantage because the work in an environment free of racism, sexism, and other judgment barriers. This shows that the virtual team can keep the anonymity of their members, and it can also overcome the third inevitable situation by lessening friction between the regular members and the outsiders.

These cases show that virtual teams can overcome and reduce the problems incurred but traditional teams. Many managers have organized a virtual team mainly to cope with these inevitable, restrictive situations in which they cannot organize a team with face-to-face meeting. A virtual team can be organized not only in which it is inevitable due to the physical distance but also in which it is even "evitable" but is more efficient than traditional, non-virtual teams.

#### V. Evidable Situation

A commonly accepted idea is that traditional face-to-face teams are better than are virtual teams. It is no surprise that many authors (Cohen 1997; David 1998; Jarvenppa et al. 1998; Ross-Flanian 1988) have reported if a manager coping with a certain problem can organize a face-to-face team ( evitable situation), there might be some cases in which a virtual team is (absolutely) better than a face-to-face team.

#### Dr. K's Experience

At 3 A.M. on Aug.28, 1998, Dr.K, who came to United States as a visiting professor for a year, received a phone call from his home country, Korea. In rubbing the sleep out of his eyes, Dr.K was totally astounded at the news that his private property may be seized by the court.

"What ? What did you say, seizure?"

His friend, who called Dr.K, said. "Sorry, you are in trouble. Can you remember that you and I stood suretyship for Jack, a guy at the personnel department in our university?"

A six-month-long memory hit his brain. But he could not do anything but listen to the kind voice of his friend across the Pacific Ocean,

"The guy went bankrupt because of his gambling. I am also in trouble reimbursing my portion of his debt, Anyway, how much is your portion?"

"I don't know right now. I have to check it out. Ph, my God."

The next morning after such a long night, Dr.K realized that he would have to reimburse more than 50,000 U.S. dollars. Above all, Dr.K wanted to talk to the trouble-maker, Jack, even through the phone, However, the only information he could find by expensive international phone calls was that the guy had already run away to a hidden place. While he was out of the country, his property was on the verge of being transferred to the moneylenders. Being driven into a tight corner. Dr.K called his younger brother and asked him to look into the situation. A few days later, his brother e-mailed Dr.K :

Dear My Big Brother :

If you don't pay back \$53,500 to creditors by Nov.30, 1998, your property will be attached by the court auction. price is usually much lower than the market price, probably you will lose almost half of your property, I guess. Amazing, I found where the stupid guy, Jack, is staying. Because his younger brother has been my friend since primary school, he believes that we are not going to hurt his brother. I'll be waiting for your reply. Bye.

Although. for a couple of months, Dr.K had attempted to take some necessary actions with his

brother's help and to contact Jack by phone, he was not sure that everything was going to be fine: e.g. \$53,500 was all he had to reimburse. He decided to fly across the Pacific Ocean to see the trouble-maker and make clear everything. Finally, he could see Jack who was hiding in his aunt's house. But at the moment that he looked at the pale face of the person who gave him a lot of pain, he could not help feeling some sympathy.

"How are you doing, Jack?"

"Pretty good. Sorry about the money."

"You have to be sorry. I have just paid 53,500 bucks, my portion of your debt"

"I appreciate it. Anyhow, a few days later, I'll go to the police."

"I guess that's a good decision. There is no other way to get out"

"Some day, I hope to pay back your money."

"Is there anything else I can do for you?"

"What more can I expect more from a nice person like you"

"All right, take care, man."

"Thanks. Oh, could you do me a favor?"

"What is it?"

"I have pledged five hundred dollars a year to an orphanage. Could you take over my pledge?"

Although Dr. K could not believe that he had made such a donation, Dr. K could not reject his favor when he looked at his bloodshot eyes.

"O.K., O.K. Where is the orphanage?"

What if Dr. had not seen Jack? He would not have a chance to see a bankrupt's poor situation. Of course, he would not have been placed in the awkward position of agreeing to donate another \$500. Likewise, face-to-face meeting sometimes makes it difficult to deliver the real message and thus to say, "No."

Ruth (1995) suggests that unintended distrust is possible with many new technologies, especially e-mail because e-mail is democratic and omnipresent, it offers an unparalleled temptation to violate the chain of command. However, we need to ask a question, "Is violating the chain of command always a bad thing?" In messages from today's management gurus, breaking

the barriers among employees and departments and flattening the organization structure are required. Rather, direct e-mail to top executives from the bottom operators help the operators to trust the business policies and to participate in management, which is one of the required factors for success in today's business.

Traditional non-virtual teams tend to expose the problem of information security, because they are based on face-to-face meetings. The problem of information security is fundamentally attributed to the face-to-face meeting, which is inevitable in face-to-face teams. Not only does the face-to-face meeting enables members to share information having no relation to the task which is given to the team, but it also enables outsiders to have information which they should not have. In a virtual team, however, if they send and receive information through the network server, all information can be tracked by the server manager. Accordingly, virtual teams can keep the confidential information from leaking out of the team. Although it may happen that some confidential information is expected to outsiders, it is possible for the server to track the center of disturbance.

We sometimes tend to put more trust in someone whom we have never seen than in one whom we have seen. This is because we know that we have a tendency to trust someone by his/her outward appearance. However, it is clear that a face-to-face meeting does not always help us to trust each other, because we can be blinded by another's facial expression and gestures. A virtual team can be effective for such situations in which even if seeing each other is possible, not seeing each other can help us to trust each other.

## **VI. Conclusion**

As it become possible for more work to be done by virtual teams rather than traditional teams, managers need to move beyond fear of losing trust. The promise of digital commerce is that it will allow one to use the Internet to purchase the best service, but completeness, reliability, and judgement must also be assessed. Human judgement and human contact are ultimately the basis for trust. Unfortunately, visions of a virtual

corporate world fail to consider the issue of personal trust (Fukuyama 1996). This paper is intended to focus on one of those group facilitators, trust, which should be regarded as an importation factor to be considered when a virtual team is organized.

But it is admitted that there are many other factors affecting the success of virtual teams because group dynamics, organizational settings, social contexts, and behavioral aspects are all important ingredients in shaping the outcomes of using GDSSs at group meetings, and therefore cannot be ignored by GDSS researchers (Er & Ng 1995); for example, Jones and Bowie (1998) assert that the success of virtual corporations will ultimately depend on an ethics-based form of corporate character that allows firms to develop trusting relationship without the usual safeguards or social norms.

To practical managers, it is important to determine when (for which situations) the virtual teams are most suitable and can be successful without losing trust. The writer wishes that this paper will help managers to find their business areas or cases in which virtual organization is most suitable without losing trust.

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