Corporate Business Ethics - Analysis and Leverage

Shigehisa Tsuchiya, Ph.D.
Professor and Chair, Dept. of Management Information Science
Chiba Institute of Technology
2-17-1 Tsudanuma, Narashino-shi, 275-0016 JAPAN
Phone : +81-47-478-0463 ; Fax : +81-47-478-0354
E-mail : tsuchiya@pf.it-chiba.ac.jp

Abstract:
Corporate business ethics have become a major topic in Japan as well as in the United States. Last year, as many as six major corporate wrongdoings were revealed in Japan, resulting in severe damage to public image and profit. Furthermore, falsification of inspection records regarding cracks at three nuclear power plants by Tokyo Electric Power Co. (TEPCO) is certain to affect the nation's energy policy. Through systemic analysis and model building of the process of the six major corporate accidents, we have identified that most important common causal factor was low business ethics, and that openness is the leverage point to improve them. Based on the findings, we have designed a gaming/simulation for a Japanese power utility company to help top management and employees make openness a part of their theory-in-use of action through experiential learning. Gaming/simulation can change actions of participants in their work and in their life.
Keywords: corporate business ethics, experiential learning, gaming/ simulation, openness, systemic analysis

1. Introduction

Corporate business ethics have become a major topic in Japan as well as in the United States. Last year, as many as six major corporate wrongdoings were revealed in Japan, resulting in severe damage to public image and profit, sharp decline of stock prices, and resignation of top management people.

In January 2002, a whistle-blower exposed how Snow Brand Foods Co. mislabeled meat products to take advantage of government subsidies tied to bovine spongiform encephalopathy, or mad cow disease, while an employee told agricultural authorities about a similar fraud at Nippon Meat Packers Inc. in August. Whistle-blowing is an attempt by a member or former member of an organization to disclose wrongdoing in or by the organization (Velasquez, 2002, p.471).

In May, an anonymous informant forced Duskin Co., which holds the Mister Donut franchise license in Japan, to admit it had sold pork buns made with a banned additive. Sales have plunged, and franchisees wanted a management shakeup. In July, two employees of Mitsui & Co. were arrested for manipulation bidding for power project on Kunashiri Island in Northern territories of Hokkaido. The Company was barred for three months from bidding on overseas projects financed by the Japanese Government. And in August, another scandal gave blow to Mitsui & Co. It was revealed that Mitsui bribed a high-ranking Mongolian government official to

secure an order for official development assistance project, which forced its top management to resign.

The Tokyo Electric Power Co. (TEPCO) scandal is the latest and most serious case of corporate wrongdoing brought to light by an insider. On August 29, 2002, the Ministry of Economy, Trade and Industry's Nuclear and Industrial Safety Agency said it had found evidence of false inspection records taken from the late 1980s to early 1990s regarding cracks at three nuclear plants of TEPCO. As a result, 14 nuclear reactors have been stopped to allow inspections and checkups.

Falsification of inspection records regarding cracks at nuclear power plants by TEPCO is certain to affect the nation's energy policy, which was devised on the premise of continued reliance on nuclear power, and will hamper Japan's efforts to fully liberalize the energy market. Expected delay in nuclear power plant construction touched off by the latest scandal could thwart Japan's plan to lower carbon dioxide emission to meet reduction targets stipulated in the Kyoto Protocol.

2. Analysis and modeling of the cases

2.1 Causal loop model

We have analyzed the six major corporate accidents in 2002 in Japan, and built a causal loop model that shows the root cause and the leverage common to these six cases (Figure 1). Leverage
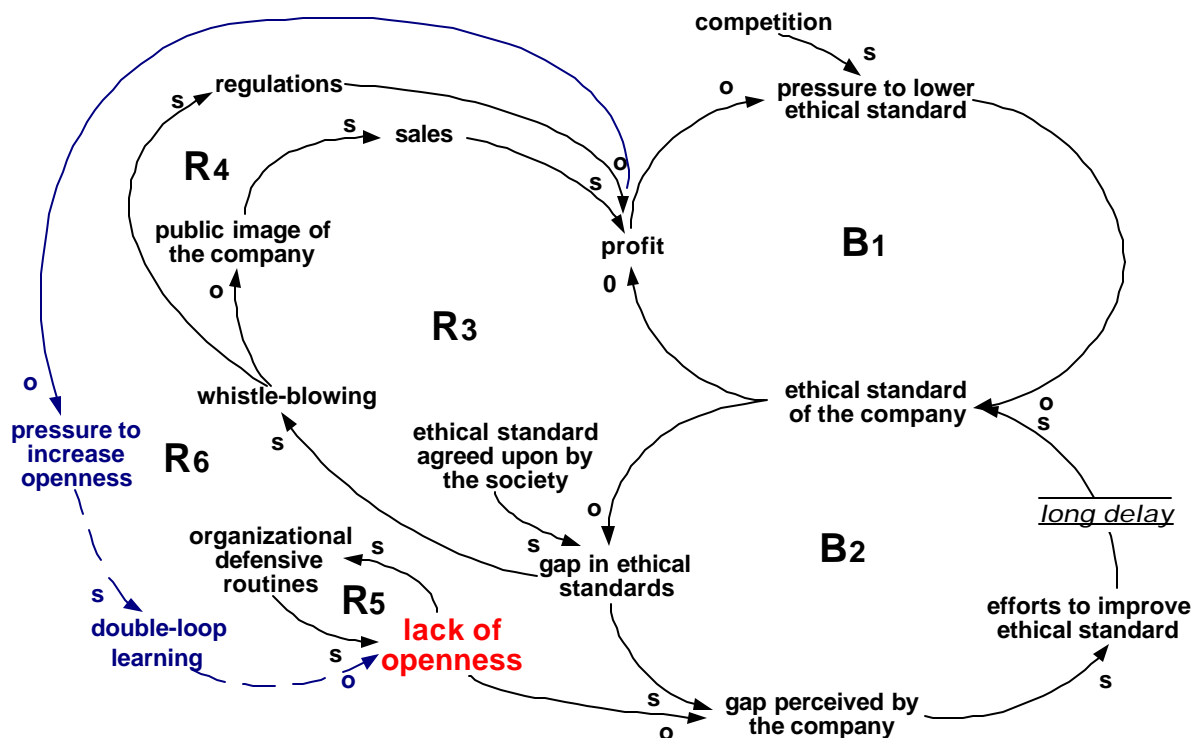

Fig. 1 Deterioration of Organizational Business Ethics © S. Tsuchiya, CIT, 2003

is where actions and changes in structures can lead to significant, enduring improvements. Our causal loop model is apparently a combination of 'shifting the burden' and 'drifting goals' systems archetypes Systems archetypes are elaborate structures that recur in our personal and work lives again and again (Senge, 1990, p. 92).

In all of these six cases, the burden for coping with intensifying competition was shifted to an easy option—lowering the ethical standard of the company, which increased profit (B1). However, a decrease of corporate ethical standard caused an increase of the gap in ethical standards between the society and the company. If it perceived the gap properly, the company could have made efforts to improve its ethical standard and, with considerable delay, its ethical standard would have recovered (B2). The company, however, did not recognize or ignored the gap because of lack of openness due to organizational defensive routines. Organizational defensive routines are actions or policies that prevent individuals or segments of the organization from experiencing embarrassment or threat. Simultaneously, they prevent people from identifying and getting rid of the causes of the potential embarrassment or threat (Argyris, 1990, p. 25). The increased gap between ethical standards of the company and the society triggered whistle-blowing by insider(s) resulting in damage to the public image of the company, falling sales, escalation of regulations, and huge loss, which in turn could increase the pressure to lower business ethics and widen the gap (R3 and R4). Reflection on the huge loss also put pressure on the company to increase openness so that the top management could recognize the gap and take appropriate actions to improve corporate business ethics (R6). However, it is extremely difficult to create and maintain open communication among members of the company because organizational defensive routines prevent openness from becoming a part of their theory-in-use of action. Openness tend to be their espoused theory that has very little to do with how they actually behave (Argyris, 1993, p. 89).

2.2 Tokyo Electric Power Company

Let us examine Tokyo Electric Power Co. (TEPCO) case in detail. Nuclear and Industrial Safety Agency said on August 29, 2002 that it had found evidence of false inspection records taken from the late 1980s to early 1990s regarding cracks at the nuclear power plants of TEPCO. It was also revealed later that their nuclear power plant falsified inspection data on the air-tightness of a nuclear reactor container by injecting air.

TEPCO admitted "there has been systematic and inappropriate management of nuclear power inspections and repair work for a long time" (Press Release, Sept. 17, 2002). They confirmed "dishonest acts had taken place, including injecting air into the primary containment vessel in order to lower the leak rate while TEPCO's workers were involved in the 15th and 16th periodic inspections at Fukushima Diichi Station's Unit-1" (Press Release, Dec. 11, 2002).

Who started this fraudulent practice of hiding data, and for what purpose? The TEPCO press release of September 17, 2002 addresses the motives and background to the misconduct: "For employees in charge of the inspection and maintenance work, the most important concern was to complete periodical inspections and to bring their own generating plants back on line as scheduled. They had a strong sense of responsibility in that regard. The top management in the nuclear departments also had the same strong sense of responsibility." The ostensible reason is social responsibility of power supply, but the real reason was apparently responsibility to the company to lower cost because it costs TEPCO 100 million yen a day to replace power supply of

a nuclear power station with that of thermal power stations. This process corresponds to the loop B1 in the Figure 1.

Lowering the ethical standard of the company widened the gap between ethical standards of the society and the company. However, lack of openness due to organizational defensive routines prevented TEPCO from perceiving the gap properly. TEPCO press release of September 17, 2002 said, "The employees in charge of the maintenance work could not help but follow such precedents (systematic and inappropriate management) in their organization, even if they felt that something was wrong. ... (The employees in charge as well as the top management) had a strong sense of responsibility. Those concerns fostered the mistaken idea in all the maintenance sections that they did not have to report problems to the regulator and local governments in the vicinity of the nuclear power stations as long as they did not cause any safety problems." This process corresponds to the loop B2 and R5 in the Figure 1.

The wide gap in the ethical standards triggered whistle-blowing. A former employee of the company contracted to carry out the inspection came forward as a "whistle-blower" informing the misconduct to the then Ministry of International Trade and Industry (MITI) in July 2002. Tepo's then president received an alarming report from a senior official at the electric power generation division, but he brushed it off as unimportant. However in May of 2002 when General Electric International Inc. (GEII), one of the main nuclear power plant maintenance company, notified the maintenance problems to TEPCO, they started an investigation. In September, the scandal was exposed, which resulted in resignation of four top management people of TEPCO including the chairman and the president, severe damage to public image and profit, shut down of 14 nuclear reactors, and sharp decline of stock prices. Ministry of Economy, Trade and Industry came up with preventive measures that center on making regular self-inspections of nuclear power generation facilities and equipment a legal requirement. This process corresponds to the loop R3 and R4 in the Figure 1.

According to the press release of September 17, 2002, TEPCO is committed to the following four measures to prevent a recurrence:

1. To improve transparency and the disclosure of public information
2. To create an environment for conducting appropriate business activities
3. To conduct more stringent internal audits and to reform the corporate culture
4. To thoroughly comply with corporate ethics

One of the New Year resolutions of the new president of TEPCO is to create "a system that will never allow workers to engage in dishonest practice" and "a climate in which workers will never engage in dishonest practice." This corresponds to the loop R6 in the Figure 1.

3. A search for new methodology

Our analysis has made it clear that deterioration of corporate business ethics was the root cause of the six major corporate accidents in 2002 in Japan. How, then we can prevent deterioration and improve business ethics?

3.1 The case method

The case method seems to be the only methodology in use for teaching and training in business ethics because moral truth cannot simply be told and passed on. Donaldson and Gini (1996, p.16) claim that adapting the case method to ethics is relatively easy because this method emphasizes

practical reasoning, which is a crucial component of ethical reasoning. Cases emphasize means-ends reasoning and can be used to do the same when the ends are not only market share and profits, but fairness and corporate integrity. Handled properly the case method can spark the search for skills and values of utmost human import. It can, perhaps more effectively than any other method, demonstrate the need for intellectual solutions to practical problems (p.19).

Yet, as Donaldson and Gini (1996, p.18) admit the case method can become a boring exposure to the prejudices of others. Cases necessarily oversimplify business situations. Whereas cases can imitate reality by demanding decisions on the basis of incomplete facts (no real-world decision maker has *all* the facts), cases are at odds with reality in presenting a "static" rather than a dynamic decision making context. A case presents a situation in which the action has already occurred, but everyday situations unfold gradually, and every hour brings fresh information to the decision maker. Hence the skills of knowing when to seek new information, and of knowing when the proper moment has arrived to make a decision, are not developed by the case method.

In Japan, most organizations are apparently not learning from mistakes - even from their own mistakes. Japanese organizations are highly reluctant to admit mistakes, and they seem to prone to repeating the mistakes and scandals over and over again. Nippon Meat Packers Inc. made the same mistake as Snow Brand Foods Co., and TEPCO did not learn a lesson from the scandal of Mitsubishi Motor Co. in which an anonymous tipster revealed in mid-2000 that the carmaker covered up product defects for more than 30 years.

It is true that some companies quickly formulate preventive measures every time another shocking scandal is uncovered. But the measures often do not work because many were actually not much more than superficial remedies. For instance, in the case of TEPCO, the company installed a system in each of its nuclear power plants in 1998 to encourage employees to covertly inform of wrong-doing, but it did not work. Staff at the company's nuclear power generation division pride themselves on helping the government implement its national nuclear power policy. The division evolved into an internal sanctuary, with no outside supervision.

Then, what can we do to prevent deterioration of corporate business ethics and improve them? From our analysis of the six cases, we claim that the leverage is openness. If it maintains adequate openness among top management and employees, the company will be able to recognize the gap between the ethical standard of the company and that of the society and take actions, which in time will improve its ethical standard (loop B2 in Figure 1).

3.2 Openness

3.2.1 Participative openness and reflective openness.
To create and maintain effective open communication essential for good corporate business ethics, we need reflective openness as well as participative openness. We have to both make it safe to speak openly and develop the skills to productively challenge our own and others' thinking.

Participative openness, the freedom to speak one's mind, is the most commonly recognized aspect of openness. This is because the philosophy of "participative management," involving people more in decision making, is widely espoused (Senge, 1990, p.277). By stating our views, we all appear to be contributing to collaborative learning—yet, little real learning takes place because, on a deeper level, no one's view is changing or being affected. Participative openness by itself will rarely lead to better quality decisions because it does not influence the thinking behind people's positions.

While participative openness leads to people speaking out, "reflective openness" leads to people looking inward. Reflective openness starts with the willingness to challenge our own thinking, to recognize that any certainty we ever have is, at best, a hypothesis about the world. It involves not just examining our own ideas, but mutually examining others' thinking.

Reflective openness is based on skills that include distinguishing espoused theory from theory-in-use, becoming more ware of and responsible for what we are thinking and not saying, and dealing with defensive routines. But these skills take time and persistence to develop, and most managers are completely unaware of them. There is no established methodology to make openness a part of their theory-in-use (Senge, 1990, p.278).

Unless these two different types of openness are integrated, the behavior of "being open" will not produce real openness. We feel a need to be more open, to which we respond with the behavior of participative openness—expressing our views more forthrightly, soliciting others' inputs, and talking more with everyone about our problems. When this happens, participative openness can become a "symptomatic solution." Then, it shifts the burden away from the "fundamental solution"—reflective openness: developing the skills of inquiry, reflection, and dialogue(Senge, 1990, p.278).

TEPCO lacked adequate participative openness. The employees in charge of the maintenance work could not help but follow inappropriate precedents in their organization, even if they felt that something was wrong. TEPCO did not have adequate reflective openness either. When the then president of TEPCO received an alarming report from a senior official at the electric power generation division in July 2000, he brushed it off as unimportant.

3.2.2 From espoused theory to theory-in-use
The question now is how to make openness as a part of the theory-in-use based on which members actually act. Firstly, we examine espoused theory and theory-in-use, and then discuss effective methodology to transform the mental models of the members.

Human beings hold two kinds of theories of action. Espoused theory is the one they claim to follow. It is composed of beliefs, values, and attitudes. Theory-in-use is the one they actually use when they act. In the six cases, openness was merely an espoused theory. Organizational defensive routines have prevented it from becoming a part of their theory-in-use.

In most organizations governing values are to be in unilateral control, to win and not lose, and suppress negative feelings. And action strategies based on the values are to advocate, persuade, sell, and use face-saving devices. Because most individuals use these actions, the actions become part of the fabric of everyday life. And because so many individuals use these actions frequently, the actions become organizational norms. The results are organizational defensive routines (Argyris, 1990, p.25).

Organizational defensive routines are actions or policies that prevent individuals or segments of the organization from experiencing embarrassment or threat. Simultaneously, they prevent people from identifying and getting rid of the causes of the potential embarrassment or threat. Organizational defensive routines are anti-learning, overprotective, and self-sealing.

In order to make reflective as well as participative openness a part of the theory-in-use of members, we need to transform their mental models through double-loop learning. Based on the results of their recent research, the first author and his colleague claim that gaming/simulation can provide interactive learning environment and make double-loop learning possible (Tsuchiya, T. & Tsuchiya, S., 1999; Tsuchiya, S., 2001).

3.3 Gaming/simulation

A parable such as Spencer Johnson's Who Moved My Cheese is an effective tool to help people discover simple truths they can use to enjoy healthier lives with more success and less stress. It can open their mind for learning by providing it with an amusing and enlightening environment to wander about. But, gaming/simulation can be much more powerful methodology especially in team learning because it involves experience. Gaming/simulation is defined in this paper as simulation that works wholly or partly on the basis of players' decision.

The most powerful learning comes from direct experience, but "learning by doing" only works so long as the feedback from actions is rapid and unambiguous (Senge, 1990, p.313). Learning by experience is difficult because, in the real world, there exist what Senge called the "dilemma of learning from experience." The factors include:

- Learning horizon: Individuals and organizations have a "learning horizon," a breadth of vision in time and space within which they assess the consequences of their actions. When our actions have consequences beyond our learning horizon, it becomes impossible to learn from direct experience.
- Scarcity of experience: History offers only meager samples of experience. Historical events are observed, and inferences about historical processes are formed, but the scarcity of historical events works against effective learning.
- Irreversibility: Actions cannot be reversed or taken back in real business. The risk and cost of trial and error is often too much for us to take. Therefore, even when the feedback is rapid and clear, most of us tend to avoid tests and therefore we miss opportunities to learn.
- Ambiguity: In addition, ambiguity in the real world makes it difficult to learn from experience.

Gaming/simulation can overcome the dilemma by compressing time and space, providing risk-free environment for trial and error, and making shared experience possible. It can change actions of participants in their work and in their life through experiential learning in the simulated world. We claim that it can change an espoused theory of action into a theory-in-use (Tsuchiya, T. & Tsuchiya, S., 1999).

There are four distinct phases to gaming/simulation design - initiation, design, construction and use (Duke, 1974, pp.75-113). Gaming/simulation design starts with the clear expression of purpose and the careful definition of the intended audience. Then, a conceptual map such as Figure 1 must be developed before construction of the gaming/simulation. It is a graphic representation of a problem environment and has been found to be valuable tools in communicating complexity in gaming/simulation. Conceptual map building has been also found to be used in systems dynamics modeling. Conceptual map as a vital method of systems representation builds upon the advantages of visual communications. These advantages include the use of symbols that are understood faster and in a more ubiquitous way that language and the simultaneity of perception of graphic displays or pictures.

4. "The Rescue Team"

At the request of a Japanese power utility company, we have designed a gaming/simulation called "The Rescue Team" for training employees about openness. Although there are some successful applications of gaming/simulation to the real world issue in the United States and

European countries, there seems to be none so far directly aiming at improvement of openness, which is the key to prevent deterioration of corporate business ethics and improve them.

Following the 24 steps of design sequence developed by Duke, we started with analyzing the six major corporate wrongdoings in 2002 in Japan. Then we developed a shared conceptual map of the factors and their relationship related to corporate business ethics (Fig. 1). The group model building (Vennix, 1994, pp.2-3) was used as a method to create a climate in which team learning can take place in design stage in order to enhance understanding of the problem.

4.1 Objective

The objective of this exercise is to open the mind of participants for learning on the subject of "openness" through objective observation of their own actions in the exercise. The exercise provides individuals with insights into their theory-in-use and into any discrepancies from their espoused theory, as well as into the causes of their unawareness of the discrepancy.

In addition, it provides the individuals with an appreciation of how they may be personally responsible for creating the defensive pattern that they decry in their organization. It also provides insights into the varieties of organizational defenses that deteriorate openness. Finally, it provides interactive organizational learning environment where risk-free practice can be done.

4.2 Background

Individuals and segments of the organization are reluctant to make open communication on any issue that contains significant embarrassment or threat. In fact, many are concerned that confronting the issue will be seen as deliberately making the situation worse by opening up a can of worms. Because most people use these actions frequently, the actions become organizational norm and are often used unconsciously.

We need methods for breaking through these reluctances and for giving individuals "permission" to deal with issues they normally would avoid because of their fear of causing embarrassment or threat. This exercise provides an interactive learning environment in which participants make objective observation of their actions, become aware of the discrepancy from their espoused theories of action, and reflect on their actions in the real world.

4.3 "The Rescue Team"

As scenario, we have chosen rescue operation in the Alps. Five players with different expertise and nationality work together to rescue the victims of a military plane crashed in the Alps in the winter of 19xx. They are competing against another rescue team to get secret information from the crashed airplane. They encounter a series of events and have to collectively make a choice between two alternatives, e.g. whether or not to make a short cut. When they make a wrong decision, they get into danger and have a narrow escape from an accident. They have to come back to the place where they made the decision. Figure 2 is an example of the events shown on the screen.

The exercise is designed to cause difference of opinion between the leader and other members. Each player has different knowledge and information as an expert in a field. The leader is proud of having plenty experience in rescue work in this area and his opinion is mostly

based on his sixth sense, while other members believe that their opinions have solid scientific ground.

Up until the last event, the leader's decision always turns out to be right. As a result, the leader becomes overconfident in his ability and inclined to ignore opinions of other members; and other members become reluctant to argue their judgments. This is the contrivance to let the participants show their true colors. The most difficult part of designing this gaming/ simulation was how to simulate the real world where people are often reluctant to make open communication on any issue that contains significant embarrassment or threat. In an exercise, however, they can act in accordance with their espoused theory which is quite different from their theory-in-use in the real world.
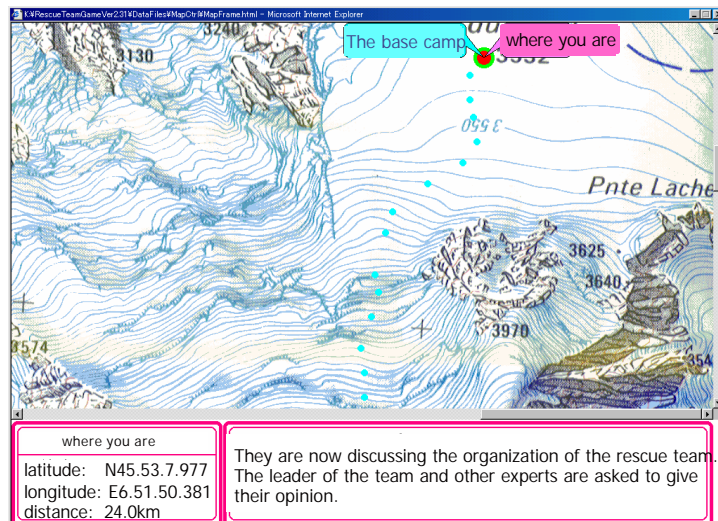
Fig. 2 An example of the events

About one third of the total time is devoted to go through the debriefing process. There are three distinct phases of post-play debriefing.

(1) The first phase involves letting the players vent their spleens about the things that happened in the exercise itself. Before asking them to analyze the experience, it is necessary to give them an opportunity to vent some of the emotions they have pent up.

(2) The second stage is a systematic examination of the model presented by the exercise from the perspective of various roles. This gives everybody a chance to see what happened from the eyes of the other role players. The world look different to those in different social situations; likewise, the exercise looks different to those in different social roles within it. Analysis cannot take place until perceptions of what transpired have been shared between participants.

(3) Finally, in the last stage of the debriefing, we urge that the players should focus on the reality which was represented by the exercise rather than the exercise itself. This means "bringing them down" and it involves getting out of the exercise situation altogether and addressing thoughtfully and at some length the actual reality that the exercise simulated. During this last phase, we show them the conceptual model (Fig. 1).

The categories of this gaming/simulation are openness, teamwork, communication, and organization development. The materials to be used are 'The Rescue Team' software, a PC, a projector, and a map. It takes about two hours to play this exercise including debriefing.

We have run the prototype of the Rescue Team several times and found that it can open the participants' mind for learning with regard to openness. Through reviewing their own actions in the exercise, the participants reflect on their actions in the real world and begin to make efforts to narrow the gap between their espoused theory and theory-in-use regarding openness. Several electric power companies are planning to use this gaming/simulation for training project teams as well as ongoing teams about openness soon.

5. Conclusions

Based on the systemic analysis of the six major corporate wrongdoings, we claim that their root cause was deterioration of corporate business ethics and that the leverage to maintain appropriate business ethics is openness. We also argue that gaming/simulation can be an effective methodology to make openness a part of theory-in-use of action through transformation of mental models.

References

Argyris, C., 1990. *Overcoming organizational defenses: Facilitating organizational learning*. Prentice Hall, Upper Saddle River, NJ, USA.

Argyris, C., 1993. *On organizational learning*. Blackwell, Cambridge, MA, USA.

Donaldson, T. & Gini, A., 1996. *Case studies in business ethics, Fourth edition*. Prentice Hall, Upper Saddle River, NJ, USA.

Duke, D. D., 1974. *Gaming: the future's language*. Sage Publications, Thousand Oaks, CA, USA.

Senge, P. M., 1990. *The fifth discipline: The art & practice of the learning organization*. Doubleday/Currency, New York, NY, USA.

TEPCO Press Release, Sept. 17, 2002 and Dec. 11, 2002.

Tsuchiya, S., 2001, Gaming/simulation for training of group decision making, *Proceedings of The Project Management Institute 2001 Seminars & Symposium* (CD Rom).

Tsuchiya, T. & Tsuchiya, S., 1999, The Unique Contribution of Gaming/simulation: Towards Establishment of the Discipline. In *The International Simulation & Gaming Research Yearbook: Simulation and Games for Strategy and Policy Planning*, Vol. 7 ed. Saunders, D. & Severs, J.. Kogan Page, London, UK, pp. 46-57.

Velasquez, M. G., 2002. *Business ethics: Concepts and cases, Fifth edition*. Prentice Hall, Upper Saddle River, NJ, USA.

Vennix, J. A. M., 1994. *Group Model Building: Facilitating Team Learning Using System Dynamics*. Wiley, New York, USA.