A Study of the Relevance between the Progress of IT and Business Ethics in Typical Japanese Organizations

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Abstract

Each lower-level organization within in most Japanese companies has its own implicit code of conduct based on its own organizational culture. The structure of the ordinary Japanese organization is expressible as a closed space surrounded by higher walls on all four sides. Also the walls are expressible as rollaway fences, changing their positions by adapting to the changes in the environment. The position of each wall becomes more indefinite by adapting to new business models such as SCM, ERP, ASP, etc. As a consequence, some of these walls become to invisible from time to time, and most companies are confronted with unconformity and confusion between the organizations in doing business. Moreover, the progress of internationalization adds momentum to the confusion. In this paper, first, the author eluc idates the peculiar characteristics of the Japanese organization's culture and problems it poses in bus iness ethics. Then, the issue of using IT on business ethics is discussed. Finally, a "wall-in model" expressing the gaps of the adjacent organizations is proposed. Then we discuss the effective use of IT for solving the problems of business ethics.

Keywords : business ethics, information ethics, organizational culture, virtual organizations, Japanese organizations, utilizing IT

Introduction

In recent years, as the result of the rapid increase of disgraced organizations, the improvement of corporate ethics has become an exploding problem in Japan. There are many underlying problems behind these trends. One of the important problems is the organizational culture peculiar to Japanese organizations. In this paper, the author illuminates various problems around Japanese organizations. We can explain the basic structure of these problems by applying a "wall theory" and the peculiar circumstance of the so-called "we-group" syndrome of Japanese. Finally, the author proposes ideas for improving business ethics.

Various Problems around Japanese Organizations

Wall-in place

The prevailing characteristics of Japanese organizations can be seen as a wall-in place as shown in Fig.

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1. Each organization has its own organizational culture. Most Japanese feel comfortable with allegiance to the organization.

Accordingly, most Japanese wish that the organization they belong to would be permanently stabilized. They have a tendency to give priority to the circumstances of their organization even more than those of the whole company. If the demand

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from another division is disadvantageous for their division, they do not correspond actively.

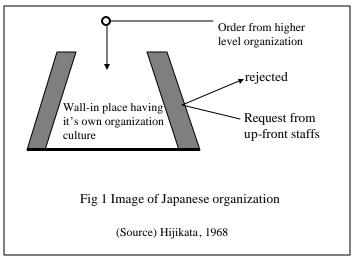
The structure of the typical Japan enterprise is expressible as a pile of castles in both vertical and horizontal directions. The most important matter of concern for the Japanese is a sense of security when they belong to their organizations. Sometimes, they will choose an antisocial act if they can keep hiding it.

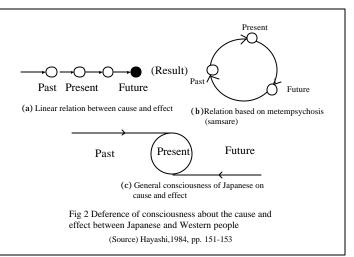
Every group has its own culture. The fundamental aspiration is to get friendly with each other and do well within the organization. As a result, there is conflict between "we-group, we-

feeling" and "other-group, other-feeling" (Hijikata, 1968).

Time and Space shared by Japanese

Hayashi (1984, pp.148-184) pointed out that there are great differences between Japanese and Western people on how they view the future (Fig.2). He said that there are two major types of cultural views about time and space. They are (1) a straight flow time axis from past to present to future, and (2) permanently revolving flow from present to future to past. The former may be found among the people in the monotheistic cultures, areas such as Christianity, Judaism, and Islam. The latter may be found among the people in the polytheistic culture area, such as Hinduism and Buddhism, including in Japan.





Hayashi also suggested that the average Japanese view about the past is somewhat different from other people. The past is not permanently in the past, but it is alive in the present. On the other hand, average western people think that the past will not return; it was over to long ago and will never come back again. Today, Japan is one of the most advanced "robot kingdoms" in the world. Yet, at the same time, the traditional technologies are still preserved intact, such as lacquered ware, woodcarving, and tradition craftwork.

In this way, there is coexistence of the "old and new" in Japan, not only in the technological fields, but also in management activities. The Japanese actively utilize computers in various fields, but, at the same time, they establish their own Shrine eon in their office, and they make a first shrine visit of the New Year, such as to Kanda-Myojin, a famous shrine in Tokyo.

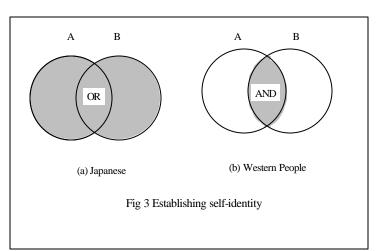
Japanese Way of Agreement

There are great differences between Japanese and western people in establishing self-identity (Fig.3).

For most Japanese, self- identity or agreement of both A and B means the sum of opinion A and B. On the contrary, for most western people, it means the product set of A and B.

In another words, for Japanese, agreement means least common multiple (L.C.M) of the various opinions concerned. As a result, to be an effective leader the manager needs the ability to ascertain the general situation of his organization and to evaluate the action of his subordinate correctly.

A manager cannot demonstrate effective leadership by simply standing at the head of his



organization. Usually it takes a long time to make any decision, but once the decision is made, it will be executed relatively smoothly because they made the decision by L.C.M.

Factors of Ethics Problem

Correspondence to the Restriction

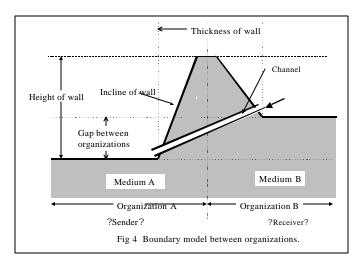
In most Japanese organizations of large scale, usually mutual understanding between the top and bottom is not smooth; the employees tend to have more interest in the familiar group than the whole company. As a result, low-end groups unconsciously become unrelated to the outside. When they encounter many restricted conditions in doing business, they will work for maintaining their own security and good feeling about the circumstances even if they bend the law or company's policy.

Too Idealistic Rules

There are many causes of ethics problems. The first cause is over-strict or too idealistic rules that cannot respond to reality. Such rules are sometimes made by abstract thinking managers who have lost touch with reality. Even if field staffs will clearly perceived that the rules are incongruous to the actual business routine, it may be very difficult to contradict the abstract thinker. Especially, if his direct superior official is too idealistic, the situation becomes worse. Employees will work against the rule behind the employer's back.

Rigid Organization and Time Lag

The second cause is in the too rigid organizational rules that, in practice, are bypassed. If the organization cannot make the transition corresponding to the environmental changes, the traditional rules become fetters. From a practical standpoint, it is very difficult to acclimatized to the changes because there will be too many divergent views and it takes too much time to arrive at an agreement. For most Japanese mana gers, behind-the-scenes maneuvering is an essential ability to manage his organization. Nobody has a chance to win in Japan without behindthe-scenes work.



Characteristics of Organizational Boundaries

Boundary Model between Organizations

Fig. 4 shows the characteristics of organizational boundaries. Characteristics of boundaries will vary by the height of wall, the gradient, the thickness, the drop and the characteristics of medium A and B.

Although some specific information will transmit from medium B to medium A through the channel, other information will not transmit because it is intercepted at the boundary. The thickness of the boundary is defined by the organizational culture and the management activities. The height is defined by the information security.

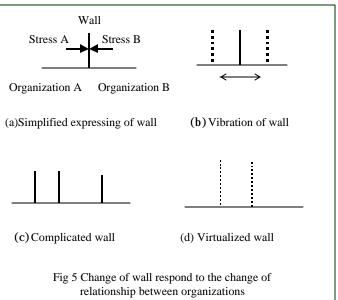
Better communication will be realized by the effective use of information technology. Meanwhile, the information filter must be provided in the channel to reject unnecessary information and avoid noise or distortion.

Vibration of Boundary

The wall model of Fig.4 is expressible as a simple vertical thick line as illustrated in Fig.5 (a).

The stress A comes to equilibrium to the stress B at the wall. In other words, the wall moves from side to side until it reaches to the balanced position of stress A and B (Fig.5 (b)).

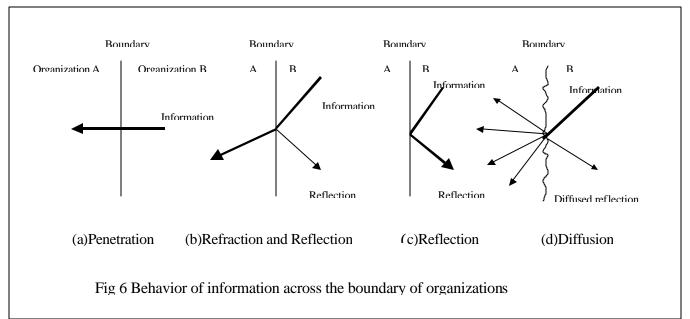
The walls became more complicated and virtualized with the progress of IT utilization such as



Supply Chain Management (SCM), Application Service Provider (ASP), etc. (Fig. 5 (c) & (d)).

Shared Information and Confidential Information

There is nonconformity of information between the organization A and B from the nature of wall, because the behavior or information across the boundary of Organization B to Organization A will vary by the condition of the boundary (Fig.6). Some sort of information will penetrate completely but other in-



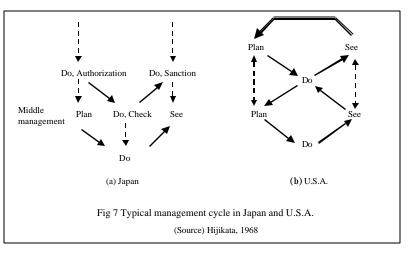
formation will refract, reflect, and diffuse at the boundary. If both organizations share entire information, the wall will no longer exist because nobody can recognize the wall.

Improving Information Ethics and Business Ethics PDS Cycle in Japanese Organizations

Fig. 7 (a) illustrates peculiar Plan-Do-See Cycles (PDS cycle) seen in most Japanese companies.

Generally, PDS Cycle is performed well in U.S. companies as shown in Fig. 7 (b). But in most cases in Japan, instead of top management, middle management will make a plan and top management will approve the plan via the so-called *ringi* system or "middle-up-down system."

In most cases, middle management plays a significant role in the decision-making process. The background of this decision-making process can be explained by L.C.M. agreement process shown in Fig. 3 (a).



Threshold Level of Business Ethics

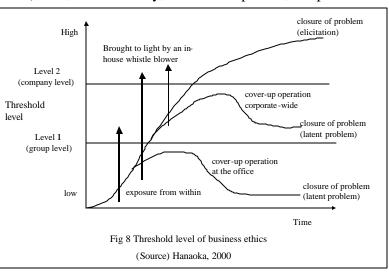
Ethical Process

Fig.8 illustrates the ethical process of most Japanese companies (Hanaoka, 2000). Once some problem occurs at the office, the person in charge will try to solve it in secret in order to maintain the "we-group" atmosphere of the organization. If his attempt succeeds, the problem is settled amicably. Then, the atmosphere will be kept in good condition (Level 1). But, unfortunately, if his attempt fails, the problem

will be exposed in the inside of the company (Level 2). From this moment, the problem will be treated as a corporatewide problem.

Hidden Problems

If the attempt succeeds in secret, the company's reputation will not get damaged and the company-wide feeling of "we-company, we-feeling" atmosphere does not get damaged. In any case, they tend to deal with these problems in secret. But sometimes, the hidden problems become an object of public concern.



Case Studies

Typical Examples

Case1: Snow Brand Food Co., Ltd.

Snow Brand Food Co., Ltd was one of the largest food companies in Japan. In the middle of 2002, the advisory panel to the health and welfare minister found cases of mad cow disease in a certain ranch in Hokkaido, Japan (Asahi, 2002; Kyodo, 2002). In order to prevent the confusion from spilling over into consumers, the Japanese government decided to let Japanese Meat Institute buy and burn the domestic BSE-infected beef.

At that time, Snow Brand Food was plagued with the rapid increase of dead inventory of the imported beef that was suspected as BSE. In order to avoid exponential declines in business performance, some of the middle management and their junior staff detached normal stickers from the packages of imported beef and stuck labels on them to make them appear as domestic beef. They illegally sold these imported products to Japanese Meat Institute, pretending that these were domestic products, at several hundred million yen. The labeling work was done in secret at a storeroom of an affiliate company. The unfair act was brought to light by an in-house whistle blower of the affiliate company. Soon it transpired that a corporate-wide group, including the COO, did the illegal act. Consequently, most consumers began a boycott of the Snow Brand products. At last, Snow Brand Food Co. was bankrupted.

Before this crime occurred, Snow Brand Milk Products Co., Ltd., controlling company of Snow Brand Food had the most strong and respected brand image. But now, the company's brand image is still distrusted by consumers, and the enterprise scale reduced substantially. In one year, the number of employees decreased from 6700 to 1500 people. The sales amount decreased from 544 billion yen to 138 billion yen in a year (Nikkei-Shimbum, 2003).

Case 2: Atomic furnaces of utility companies

Three employees of the affiliate company of Tokyo Electric Power Co., Inc. (TEPCO) were exposed to a massive dose of radiation in the critical incident at the atomic furnace on September 30, 1999 (CINIC, 2002; Kyoto-seika, 2002). The air in the surrounding area was contaminated by radioactivity. The radiation levels reached as much as 16,000 times the normal level.

The cause of the accident was the shortage of employees' initial training and disregard for the security of radioactive materials. Consequently, most employees customarily ignore the security guidelines by imitating their elders. The upper level of the company was indifferent to this fact. After this accident, TEPCO checked the safety level of the nuclear reactors again. As a result of the survey, it became clear that the illegal treatment is performed in many nuclear reactors.

As a result, the public opinion against the atomic power generation became greater. TEPCO suspended the operation of many nuclear reactors. It was uncovered that there are similar problems in power suppliers other than TEPCO. Consequently, for the summer of 2003 a serious electric power shortage is expected in Japan.

There are many problems in the background of the accident. Firstly, TEPCO was lacking in the safety education and training to the employees of the affiliate companies. Secondly, most employees took interest in the productivity and less interest in the safety operation. Thirdly, upper levels took less interest in the actual status of their plants. It was difficult to apply the operating procedures, because the rule was needlessly too ideal. Most Japanese companies, especially in large companies including TEPCO, tend to insist on perfection because every decision-making should be done on LCM bases as shown in Fig.3. Moreover, as it takes too much time to make revisions of unrealistic rules, much misfit will be found between words and actual intention.

Case 3: Defense Agency and Fujitsu Ltd.

A systems engineer who belongs to the subcontract company of FUJITSU stole the secret circuit diagram of the Ground Self-Defense Force (GSDF). At that time, FUJITSU treated him as the partner of FUJUTSU and had dispatched him to GSDF (Yomiuri, 2002; Atmarkit, 2002).

On August 8, 2002, he feed the circuit diagram of the data communication system to his notebook computer and took it outside of the institution. Then, he and his two colleagues put pressure on FUJITSU to buy this secret information. FUJITSU refused their demand. Both FUJITSU and GSDF did not know that the secret information was stolen until they were threatened.

The first cause of this event is in the lack of exact registration of the subcontract firms to GSDF. Second, incoming and outgoing control of GSDF was not well managed. Thirdly, the management of both organizations took no notice of the leak of the secret.

Case 4: Corporate consolidation between Dai-Ichi Kangyo Bank, Limited and other banks

Dai-Ichi Kangyo Bank, Limited (Dai-Ichi), Fuji Bank Limited (Fuji) and Industrial Bank of Japan, Limited (IBJ) merged on April 1, 2002. A new company became the biggest bank in Japan (Atmarkit, 2002; Webook, 2002; Plaza, 2002). However, until now the information systems of the new bank have not been able to adapt to the merger. As a result, even now, customers of Fuji are not able to use the Automatic Teller Machine (ATM) of Dai-Ichi. Also, customers of Dai-Ichi are not able to use the ATM of Fuji. The integration of the branches is the most important purpose for curtailment of expenditure. But even now, we can find here and there the strange phenomena of two branches of the same bank standing side by side. This integration plan was carried out under the leadership of the information system sectors of each bank. Furthermore; the top management was indifferent during the development of the new information system. As a result, top management did not know the serious condition of the information system.

Case 5: Mitsubishi Motors Corporation

On August 22, 2000, it became clear that Mitsubishi Motors Corporation failed to announce customers' recalls (Autoascii, 2000). The person in charge hid the recall documents in his locker and postponed its announcement because the corresponding budget was lacking. The Management did not know this fact at all.

As a result, Mitsubishi Motors received the severe criticism of the consumer, and the business results worsened rapidly.

Case 6: Japan Food mixed imported beef with the products illegally

In September 2002, Japan Food, 100% Affiliate Company of Japan Ham, mixed imported beef with the domestic products and pretended that those were the products of 100% domestic beef. Moreover, the products were sold to the Agriculture, Forestry and Fisheries Ministry (AFFM) as Urgent inventory Adjustment Project of Domestic Beef. They camouflaged the outer cases and slips of imported meat as if they were domestic beef. When this misdeed was disclosed, they bought back and incinerated the product for the destruction of evidence (Imix, 2002). The whole company seemed to engage in this illegal act. As a result, the products of this company were boycotted by the consumer and the business results of the company worsened sharply.

Typical Trends of these Cases

The above cases are classified into the following two types (refer to Figure 8).

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In Case 1 and Case 6, there were systematic violations including top management. They participated in cover up illegal action. These cases correspond to Level 2 in Figure 8.

As for Case 2, Case 3, Case 4 and Case 5, top management of each case, did not grasp the appropriate perception of the present situation.

There are the following characteristics that are common to these cases.

- 1. There are firm walls between the organizations.
- 2. The circumstances of the organization have priority over the whole. As a result, the company's continuation became endangered.
- 3. PDS cycle is dysfunctional among the organizations.

The fundamental causes of these trends are as follows.

- 1. Sharing the tacit wisdom between the organizations was insufficient.
- 2. Object of the knowledge management (KM) using the computer is limited to formalistic, periodic data obtained from the routine data processing.
- 3. In most Japanese companies, information technology is hardly useful for sharing the tacit wisdom.
- 4. There was a difference between words and actual intention.

Utilizations of IT

Generally speaking, most of the Japanese firms, including the above cases, have been utilizing IT very effectively in various fields including SCM, ERP, etc., except Small and Medium-sized Enterprises (SMEs) (Hanaoka, 2002, pp.659-664). However, the fields of IT applications are mainly limited to the transaction processing and its applications. Furthermore, the influence of SCM in Japan is far behind the USA. For example, the SCM of Dell model is predominant even in Japan. It seems that the IT applications in Japan delayed especially in the field of KM. The main cause of this delay is in the traditional "we-group" attitude of Japanese.

On the other hand, the boundaries between the organizations, i.e., the boundary of "we-group" became ambiguous, especially by introducing ASP and outsourcing. As a result, the accusations from inside increased. Namely, their colleague who belongs to the same group betrayed them. But actually, they are not colleagues but they belong to the outside companies.

We must introduce the merits of the Western European way of thinking, especially in the field of information ethics. At the same time, we must preserve intact the merits of the traditional Japanese way of doing business.

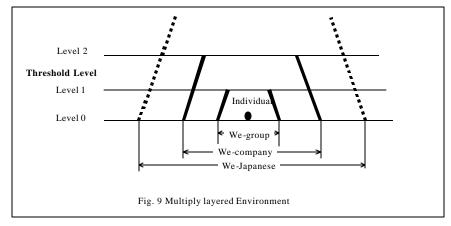
Conclusion

Multi-layered Environment

Multiple Walls

These cases show that most Japanese perform their tasks within an old castle surrounded by multiple walls (Fig.9). Between the walls, there is peculiar organizational culture that comes from "we-group" or "we-company" pathos.

One of the most significant characteristic features of Japanese management is long time employment. Most Japanese do not want to change jobs, because, after all, the workplace feels good. He immerses himself in "we-group" feeling unless he belongs to the organization. He does everything he can to maintain this comfortable circumstance even if his action goes somewhat against to the



company's policy. Sometimes, his senior staff knows nothing what is going on among his junior staff.

In typical Japanese companies, the majority of core competence has been kept at the personal level, in the we-group, not in the company; such as micro fabrication, precision techniques, artisan skill, meticulous fieldwork, and so on.

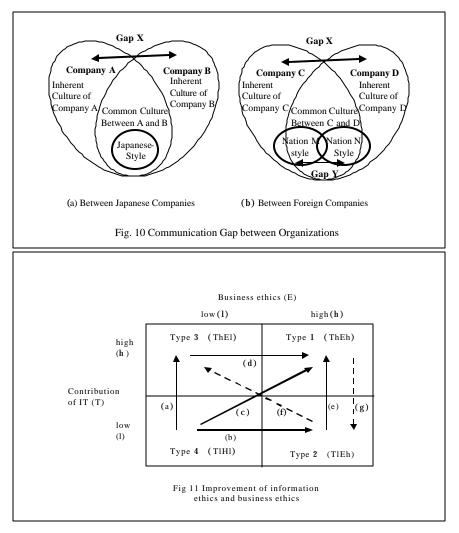
Those skills are handed down to the young employee through the boss and his henchmen relations.

Issues related to the BtoB Environment

As the use of IT BtoB activities progresses, it becomes more serious to reduce the communication gap (Gap X) between each company (Fig.10 (a)). Each Company has its own inherent culture different from each other. At the same time, among these companies, there are common Japanese cultures.

If each company belongs to another nation, Gap Y in Fig.10 (b) will be generated. The main cause of Gap Y is originates from the difference of consciousness and self-identity shown in Fig. 2 and Fig. 3.

The most effective countermeasure to reduce Gap X is improvement of mutual communication and understanding each culture. From now on, the internationalization of the Japanese firm will be promoted. The important issues for Japanese companies are to accept international de facto standard and to maintain the merit of Japanese management style.

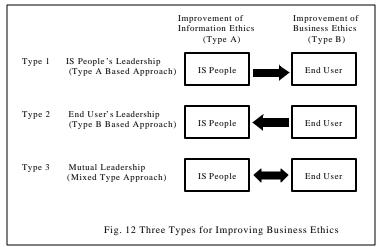


Relation between Information Ethics and Business Ethic

Information ethics is considered as a part of business ethics. The improvement processes of business ethics are classified into four types as shown in Fig.11.

Type 1 is an ideal model because IT effectiveness is high and maintains high level of business ethics. As for Type 3, the effectiveness IT is low and business ethics is still in low level.

The case studies indicate that there are five types of improvement processes indicated by arrow (a) to (e) in Fig.11.



TQC and small group movement

In most companies in Japan, employees enthusiastically grapple with total quality control (TQC) and small group movement (SGM). Even in these cases, the characteristics of the small groups are the same as "we-group", i.e., parties of good friends. They provide further insights into improvement of their own jobs for the company. Of course, they are very happy if the reputation of their company is good. However, they still give more priority to the circumstances of "we-group" than the whole company.

Excellent Information Systems

The Excellent Information Systems (EIS) must be able to contribute to attaining business targets through supporting the effective, efficient performances of organizational innovation, management and business activities (Shimada & Hanaoka, 2000, p.771). However, the EIS is predicated on excellent innovative organizational culture, i.e., a mechanism for sharing knowledge and ability of organizational learning.

Further Research Tasks

The results of the case studies indicate that there are three types of approach for improving business ethics (Fig 12). The typical feature of Type 1 approach is IS people's leadership for improving business ethics. In this case, at first the IS people improve information ethics resulting in an improvement of the end user's business ethics. In Type 2 approach, the end user's business ethics will be improved at first stage and, as a result, the information ethics will be improved. Type 3 is a mixed approach of Type 1 and Type 2. The information ethics and the business ethics will be improved simultaneously. Further study is necessary to figure out the enablers for improving the business ethics.

The urgent problems for effective use of IT for most Japanese companies are: (1) to establish the evaluation measure of the effectiveness of IT acceptable both IT personnel and the end users, and, (2) how to make general consensus between them (Hanaoka, 1998).

References

Atmarkit (2002) Report from <u>http://www.atmarkit.co.jp/info/backnumber/tsushin/attsu020403/txt</u> (Japanese language)

- Autoascii (2000) Report from http://www.autoascii.jp/auto24/issue/2000/0822/54nec.ma0822_01.html?kr12 (Japanese language)
- Asahi (2002) Report from http://www.asahi.com/national/yukijirushi/ (Japanese language)
- Atmarkit (2002) Report from http://www.atmarkit.co.jp/fbiz/column/fl/reg092/01.html (Japanese language)
- CNIC (2002) Report from http://www.cinic.or.jp/books/images/tepco-100:jpg (Japanese language)

- Hanaoka, S, et al., (1998) Evaluation of the effectiveness of information systems Making general consensus between IS division and end users, *Proceeding, International Management Accounting Conference II*, July 13-14, Kuala Lumpur, Malaysia, Malaysian Institute of Accounting.
- Hanaoka, S., et al. (2001) Using IT to improve communication between boundary or organizations Case studies in Japanese companies, *Proceedings Informing Science Conference*, 2001.
- Hanaoka, S. (2002) A Study of the B2B Progress in Japan, 2002 Proceedings Information Science + IT Education Conference, Cork, Ireland.
- Hanashi, S. (1984) Management and Culture (Japanese language), Tokyo: Chuokoron-sha, Inc.
- Hijikata, B. (1968) Principle of merit promotion and dynamic organization (Japanese language), Tokyo: Institute of Business Administration and Management
- Imix (2002) Report from <u>http://www.imix.or.jp/mikawa/rinjinews_hamu.htm</u>(Japanese language)
- Kyodo (2002) Report from http://www.kyodo.co.jp/kyodonews/2002/yukijirushi/ (Japanese language)
- Nikkei-Shimbn (2003) 'Business results recovery of Snow Brand,' Nikkei-Sshimbn, Jan. 23,2003
- Plaza (2001) Report from http://plaza17.mbn.or.jp/sonpononakama/2001.3.siri-zu.htm(Japanese language)
- Kyoto-seika (2002) Report from <u>http://www.kyoto-seika.ac.jp/nakao/archives/magazine/tokai_village_02.html</u> (Japanese language)
- Shimada, T; & Hanaoka, S. (2000) An Empirical Study of Excellent Information Systems in Japanese Firms, Khosrowpour, M. (ed) *Challenges of Information technology Management in the 21st Century*, Idea Group Publishing
- Webook (2002) Report from http://webook.hp.infoseek.co.jp/200207/200207.01.htm (Japanese language)

Yomiuri (2002) Report from http://www.yomiuri.co.jp/features/privacy/2002/pr20020808_01.htm (Japanese language)

Biography

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