Virtual Crisis Preparation Team: A Way to Improve the Crisis Management Vulnerabilities of Traditional Korean Organizations

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요 약 OECD (Organization for Economic Cooperation and Development)에 가입하는 등 엄청난 경제 발전 속도를 자랑하며 전 세계 개발 도상국들의 부러움을 한몸에 받았던 한국은최근 외환고갈에서 비롯되어 IMF시대라 불리우는 사상초유의 경제위기를 겪고 있다. 그러나 현재 겪고있는 경제위기는 만일 현재의 위기를 슬기롭게 극복하지 못했을때 앞으로 닥칠지도 모르는 또 다른 위기들에 비하면 아무것도 아닐지도 모른다는 비관적인 이야기도 있다. 그리고 경제의 세계화가 더욱 진행 될수록 정치, 경제 등 모든 면에서의 불확실성은 더욱 증가 될 수 밖에 없으므로 미래에 대한 체계적인 준비가 무엇보다 중요하다고 하겠다. 이러한 관점에서 본 논문은 전통적인 한국의 조직들이 닥칠지도 모르는 위기에 대비하는 한가지 대안으로써 Virtual Crisis Preparation Team에 대한 의견을 개진하고자 한다.

Abstract Korea, one of the members of the Organization for Economic Cooperation and Development (OECD), has been one of the fastest growing countries in the world since World War II. However, Korea has recently suffered from an economic crisis which has been mainly attributed to a fluctuating foreign currency rate. The future of Korea relies on how the country prepares and copes with the crises. There have been enormous effort to solve current economic crisis. However, preparation to the anticipated crisis is much more important than solving problems after the crisis. Recently, the virtual crisis preparation team approach appears to be one of the effective alternatives to cope with various crises.

The objectives of this study are to (1) show that crisis preparation is very important factor for the Korean government to cope with the current and future crises; (2) to prove that the virtual crisis preparation team is one of the better alternatives to solve crisis; (3) to suggest a virtual crisis preparation team model can be adapted to the Korean situation.

1. Introduction

South Korea, one of the members of the Organization for Economic Cooperation and Development (OECD), has been one of the fastest growing countries in the world since World War II. But the tremendously rapid growth achieved with an attitude of "far to go but no time to get there" left the

country with many problems such as high prices, wage increases, conflicts between labor and management, and a lack of crisis management abilities. Specifically, Korea has recently suffered from an economic crisis which has been mainly attributed to a fluctuating foreign currency rate. Korea has eventually been reduced to one of the beneficiary countries of the International Monetary Funds.

Although Korea is having severe difficulties in solving the current economic crisis, this is just one of the countless crises which Korea has encountered, it is encounting, and it will encounter. The more globalized

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the world, the more crises will come about. The future of Korea relies on how the country prepares and copes with the crises. At this point in time, the ultimate question is how Korea should prepare for the coming crises in the international market, which means a flexible, complex, and competitive environment.

2. The Purpose and Procedure of Research

This research is aimed at helping policy makers in government and decision makers in business recognize how important crisis preparation is and at showing how a virtual Crisis Preparation Team (CPT) can assist them in preparing for the crisis. To accomplish this purpose, this research, based on a review of the literature, has the following objectives: (1) to show that crisis preparation is a very important factor determining whether a crisis is to be an opportunity or not and that the Korean government and corporations as organizations have a critical problem coping with crisis preparation; (2) to prove that the virtual CPT, a kind of virtual organization armed with information technology, is an effective way for them to cope with today's turbulent environment such as in a sudden economic crisis; and (3) finally to suggest how a model of virtual CPT as an exmaple can be adapted to the Korean situation based on actual cases of virtual organizations.

3. Review of the Literature

Crisis management is a rapidly growing field in both practice and research. The structural aspects of crisis management are well-defined, with relatively precise guidelines on how to plan for a crises, whom to communicate with during a crisis and how to use crisis-response strategies (Coombs 1996; Pearson & Mitroff 1993). Also, many researchers have attempted to divide the stages of crisis management: Augustine (1995) s 6 stages (avoiding, preparing, recognizing, containing, resolving, and profiting; Hale (1997)'s 5 stages (mitigation, planning, warning, response, and recovery) based on Fink's (1986) 4 distinct stages (prodromal, acute, chronic, and resolution). Moreover,

Mitroff (1988) shows that two frameworks, a portfolio and a process model, can give organizations a way to determine which potential crises an organization should prepare for and which can be safely ignored. All these attempts clearly show that there are a phase prior to the crisis before it occurs: it is summarized by three stages: precrisis, oncrisis, and postcrisis. However, unfortunately, although it is asserted that some actions need to be taken to cope with crises before they happen, it is rarely to show that those actions should be systematically prepared by whom and how they can be organized and should be existed prior to a crisis. This article focuses on the stage of the preparation which is also called planning or prodromal.

Continuing global proliferation of technology and managerial know-how, the reorganization international economic boundaries, and the ongoing emergence of new players in world markets promise an even more turbulent and complex competitive environment. Such environments call for an ambidextrous organization, simultaneously demanding efficiency, innovation, and flexibility. Many authors have argued that team-based management is one of the best ways to cope with today's turbulent world (George et al. 1994; Rowe & Boise 1973) and it is necessary to cope with the changing world and to solve the problems characterized by complexity, flexibility, and transiency. Although the virtual CPT is an evolving concept, the possibility of its design and implementation has been established by many authors on management such as crisis management, team management, and virtual organizations.

Since Drucker (1988) asserted that the new organizations utilizing information technology were to come about, authors have, in earnest, dealt with many new organizational concepts. There include country-by-country based management, information-based organizations, flexible work force, restructuring of functional organization, and virtual enterprising. Moreover, Mowshowitz (1997) indicates the types and range of problems that can be solved through virtual organization. Based on this literature, this article suggests that, as a way of crisis management, virtual CPT should be organized to analyze the current environment, to identify and inform

the coming crisis, to make a plan for crisis management, and to transfer control to a Crisis Response Team (CRT).

4. The Rethinking of Crisis

4.1 The Scope of Crisis

Crisis has been defined as a state in which our existing responses are inadequate to alter the situation to our advantage. Housel and his colleagues (1986, p.389) mention that, as the business environment becomes more complex and the frequency of crises increases, crisis will be a central part of strategic management. Most business owners and government officials tend to think of a crisis as a sudden, devastating natural disaster. In fact, many authors have mainly dealt with natural disasters such as typhoon, starvation, and epidemics, aircraft and marine accidents, or nuclear accidents. Yet, a number of authors mention that a crisis is usually triggered by more commonplace developments, which are the loss of a key customer, a new education program, market share drop caused by a new business's opening, and erosion of positive public perceptions. Futhermore, Rosenthal and Kouzmin (1997) assert that current horizons in crisis and related studies need to be broadened. Above all, Korean government officials and business owners also need to broaden their view of crisis from natural disasters such as typhoon and fire to socioeconomic disasters such as unemployment and currency fluctuation.

4.2 The Importance of Crisis Preparation

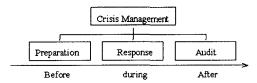
Recognizing the occurred crisis is not the problem. A countless number of authors strongly assert that prevention or preparation is the best way to cope with a crisis and that every company, no matter what size, needs to prepare for a crisis (Hemeyer 1997; Mitchell 1986). Mitroff (1988, p.17) comments on the crisis induced by the Challenger explosion in 1986: The immediate "cause" of the disaster was a faulty O-ring, a poor engineering design that led to a catastrophic technical break. However, the real precipitating cause

of the accident was a bureaucratic organization that deliberately blocked repeated warning signals. survey of Fortune 500 chief executive officers shows that those companies who had crisis management plans could recover much faster than those with no plans. A 1996 survey shows that, of more than 100 Fortune 1000 companies, 86 percent of executives considered crisis management very important to business continuity (Stateman 1997). Despite this awareness, many companies with seemingly sound risk management programs operate without a crisis management plan. It is reasonable to believe that, if someone wants to prepare for a coming crisis, he must aware of the possibility of the crises occurring. How can managers or politicians, not God or prognosticators, predict the future crisis? A surprising study shows that only 14 percent of business crises are unexpected. A review of 50,000 recent news stories reveals that, in 86 percent of the crises, the organization was aware of the potential business disruption long before the public found out (Elsasser 1996). In fact, even before September 1997 when the Korean economic crisis came into view, many proponents, including Lee Kun-Hee, chairman of the Samsung Group, had warned that Korea was on the brink of a Mexican-style crisis (Bremner 1997; Lim 1997; Martin 1997). There were, of course, several authors who did not consider Korean economy as in crisis regardless of the inauspiciousness of events (Chen 1997). To managers or politicians who are facing the pro and con, the crisis management authors advise them to develop a "worst-case" strategy (Hickman & Crandall 1997; Pitt 1994).

4.3 The Rethinking of Crisis Management Team (CMT)

There is an agreement that crises should be responded to by a team, which has been called CMT, composed of people who are creative, knowledgeable of the business, powerful (having the authority and responsibility to make decisions and allocate resources quickly), and able to bring a variety of unique perspectives to bear on solving the problem (Hickman & Crandall 1997). The key role of the CMT is to centralize decision-making and communications to gain control of the situation and resolve the issue. In

addition, the role of CMT has been largely confined to the moment of a crisis, when it breaks out, not before the crisis even though the concept of management comprehensively includes the three major phases which are before, during, and after the crisis. Based on time-series, it is needed to separate crisis prepartion from the response during the crisis and the auditing after crisis. In other words, a CMT is a concept including those three teams: CPT, CRT, and CAT (Crisis Auditing Team) as shown below:



<Figure1> The Structure of Crisis Management

Although it is also strongly suggested that a crisis be prepared for the planing is very important, that CMT be organized on an ongoing basis, that ambiguity about who is responsible for preparing the plan contributes to apathy and that a crisis planning team should be established (Volunteer Safety Council 1997), rarely have authors shown how the CMT can be and should be organized before a crisis. Consequently, to identify and prepare for a coming crisis prior to its breaking out, an organization needs to organize a preparation team, which is composed of people who are from diverse areas and which is different from a traditional CMT.

Korean Organizations which are vulnerable to Crisis Preparation

Since the late 1980s, Korean government and business organizations have been seriously affected by the global market: (1) departments and employees are dispersed all over the world; (2) the boundary of organization becomes faint; and (3) the span of life of department or organization as well as a product is shorter and shorter. The Scoupe automobile is a product of a global firm: its body is designed by Ital Design of Italy, its suspension is by Lotus of England,

and it is manufactured by Hyundai of Korea. Miles and Snow (1984) describe such a firm as a "world enterprise, buying raw materials wherever they are cheapest, manufacturing wherever costs are lowest, and selling wherever the products will bring the highest price." But, when a crisis happens, it can affect the whole production lines scattered in the world. How should Hyundai prepare for and cope with the crisis? As governments and companies pursue global business and politics, they confront many unique problems -problems that, if not handled properly, will become crises. However, as shown in the economic crisis of 1997, unfortunately, the traditional Korean organizations failed to properly handle the problems which are inevitable in today's kaleidoscopic environments created by globalization. The failure is attributed, it is believed, to three major vulnerabilities of typical Korean government and business corporations: (1) tardy decision-making; (2) poor interorganizational cooperation and information sharing; and (3) an easy-going attitude.

5.1 Tardy decision-making

While fast decision-making is one of the most important factors which determine the high quality of a company's business, tardy decision-making is a fatal factor in today's speedy environment. The speed is one of the required factors in coping with a crisis. The first purpose of CPT in crisis management is to identify the coming crisis and to notify it to CRT as fast as possible. But tardy decision-making is the most terrible enemy who interrupts doing those actions. Kyung Sik Lee, minister of finance and economy at the time of the economic crisis in 1997, testifies that "Although he and his team felt the seriousness of foreign currency rate crisis and did repeatedly holding meetings, they could not reach a conclusion (Chosunilbo 1998)." This shows straightforwardly that Korean organizations have a critical problem in making a fast decision. Korean organizations are vulnerable to in this regard because of their multi-level hierarchical organizational structure and top-down organization culture. Asian workers including Korean are accustomed to working within a strict hierarchy of power; observance of rank is important and

participatory management is not always welcomed. Specifically, Koreans prefer to communicate formally and intuitively (Hynson 1991). It is also pointed out that the traditional weapons (Lee et al. 1991) such as experience, aggressiveness, and intuition appropriate for the 1970s and 1980s, no longer work for crises breaking in today's business environment. The multi-level hierarchical organizational structure has made the oranization slow, and the top-down organization culture discourages the low-echelon units from thinking a problem and solving it for themselves. Eventually, these two factors have slowed down decision making even in a crisis.

5.2 Poor interorganizational cooperation and information sharing

It is essential to have interorganizational cooperation and information sharing in the global economy, and a cuts across traditional functional departmental lines. The energy overconsumption crisis (Shin 1991) in Korea in the early 1990s has shown that interorganizational cooperation and information sharing are indispensible to solving the problems driven by today's turbulent environment. in preparing of a crisis as well as during it, from assistance may be required not only from internal personnel and departments but also from the external experts, advisors, and counselors who actually may play an important role in the decision-making process around the world (Volunteer Safety Council 1997). To gain this assistance, an organization needs to have the base of cooperation and information sharing. In other words, crisis management and preparation requires pulling together a crisis management or preparation team that will make available a variety of perspectives on the problem. However, it is believed that the Korean economic structure dominated by a combination state intervention and a few chaebols (conglomerates or financial cliques) is fatal to attempts to organize a team from diverse areas and to integrate their efforts. This is because the organizational structure of government and chaebols is not pragmatic but mechanistic. While a pragmatic response structure is usually associated with some form of matrix or project organization (Davis & Lawrence 1978), a

mechanistic response structure, typical of Korean organizations, tends to involve a routine-oriented bureaucratic hierarchy and formal chains of command and communication. Organizations whose precrisis structure resembles the pragmatic type will experience less difficulty in adapting to crisis events.

5.3 Easy-going attitude

It is the lack of flexibility that has contributed to an easy-going attitude. Lack of public awareness of the threat and a tendency to underestimate the risks involved are major contributors to apathy about preparedness. Korean corporations, government, and unions have focused on the concept of lifelong employment. However, as the business environment became flexible, Korean organizations, which have depended on the steadfast chain-of-command structure, became more and more inefficient. This has not only discouraged the employees from preparing for the changing world, but also encouraged them to have an easy-going attitude. It is not possible for inflexible organizations to cope with the crises driven by a flexible environment. Consequently, Kim (1997) advises that the Korean administrative structure in the 21st century must adopt a more flexible view. From the standpoint of human resources, such flexibility has entailed, increased reliance on temporary and contract workers and on outsourcing to low-cost suppliers, based on higher skill levels, has circumscribed worker participation in production, and has brought about more adequate wages and worker benefits. Unfortunately, Korean organizations which have low flexibility could not have taken advantage of changes so far. Jeon (1994) asserts that, for the continued survival and prosperity of developing countries likely to be vulnerable to the changing world order, it is of great importance to enhance the flexible adaptability of the system via a progressive political softening of one's position rather than furthering an already politically rigid system.

There have been pointed out that Korean government and just a few chaebols have played a leading role in developing the economy of Korea. However, too much reliance on a small number of "elite" chaebols has led the country to become

incensitive to the potential crisis. It is, of course, mentioned that the real catalysts in the economic success of Korea have been the efforts of the private business sector, especially those of the chaebols (Kenworthy 1996). Although the government's control of resource allocation worked well enough at first, when the economy was relatively simple and the way to increase production was to invest heavily and copy rich countries' technology, as Korea climbed toward higher standards of living, even mightier competitors crowded the stage. And the economic structure, which has long depended on the hypertropic chaebols and government-guided development, made the nation and organizations have an easy-going attitude and eventually made them insensitive to the crisis, because it has been difficult to control the lowest echelon of public officials and departments because of their size. Park (1995) also asserts that the Korean experience prior to capital market opening in the early 1990s is inapplicable to other economies emerging with financial markets closely integrated into the world market. The recent trend, the chaebols' efforts at separating or selling of their subsidiaries, implies that an organizational structure such as a chaebol can no longer compete with other companies in the world.

6. The Virtual CPT to Improve the Vulnerabilities

Although a crisis bring about a tremendous loss only if it happens, managers do not tend to spend time and money on preparing for the coming crisis. In fact, it may be extravagant that, in order to prepare for a crisis, a team should be organized and have a regular meeting to coordinate with exterior personnel to evaluate and update the plan in a conference room. But recent advancements in information technology such as the World Wide Web, high-speed network hardware and software, groupware, and group support systems have opened the possibility of implementation of new organizations (O'Leary et al. 1997). In fact, the use of those technologies has dramatically increased in organizations. And such an accelerated speed of shifts in technology, job tasks, and staffing within organizations leads to virtual structures. It is

strongly asserted that a virtual organization is necessary to cope with a complex and flexible environment (MacCormack et al. 1994), because the virtual organization has been described as having three characteristics: (1) transcendency; (2) infinity; and (3) flexibility. And it is asserted that each of these three vulnerabilities. Korean organizations have long possessed addresses a corresponding vulnerability in Korean organizations

6.1 Transcendency vs. Tardiness

A new form of corporation, the virtual enterprise, is evolving armed with information technologies to collapse time and space. A virtual enterprise can quickly harness the knowldege of staff members, regardless of their location, and enable companies to respond faster to increased competition (Pape 1997). One of the factors leading to the tardy decision-making is that those who are concerned in a crisis are scattered all over the world. Littleiohn (1995) mentions that the crisis plan should include a twenty-four-hour notification desk and a tracking system designed to ensure rapid notification of the CRT at any time, and the plan should provide basic information about the CRT members. Moreover, the plan needs to be updated periodically, at least once a Information technology enables the team members to communicate with one another without regard to jet lag even if they are scattered all over the world. This feature is called transcendency.

Speed is critical, and fast responses to crises depend on having just-in-time information technologies working for public relations. Just-in-time tools such as e-mail and videoconferencing allow key figures to stay in touch with one another. An immediately available crisis forum emerges. Modest computerized database and communication software infrastructures can support the CMT by deploying information and expertise, providing simple but often unavailable and supporting decision making. information, Organizations in global society need to respond quickly Speed and to changes in the environment. time-phased actions are possible, in part, because many such enterprises have become "virtual organizations." If a number of crises for which a company has to

prepare are distributed by the team, then the hierarchical decision-making structure can also be decentralized by each of the virtual CPTs. Carroll (1994) states that this new model of organization, virtual organization, can have a flatter hierarchy because much decision-making is decentralized.

6.2 Infinity vs. Cooperation and Information Sharing

Hemeyer (1997) suggests that organizations need to establish their own network or system to alert them to changes or events that can affect their businesses, to keep a list of relevant contacts -- including customers, media specialists, key client executives, government officials, third parties, lawyers, risk managers, security managers, and environmental experts -- and to have experts on standby to get help in preparing for a crisis. To take this advice, an organization needs to be organized virtually. Because the confined members of a traditional team cannot have and activate the perfect knowledge and information in preparing for the crisis, the preparation necessarily requires the team to cooperate with other teams or outside consultants and to share information with them as well as with the Virtual organizations enhance the team members. availability of resources from outside the organization. Shirreff (1996) states that, as financial supervisors are faced with a diversity of complex institutions, quicker and better the cooperation between supervisors, the less likely it is that a problem will disrupt the markets. The virtual organization can have an infinite number of participants, and information technology electronic meeting systems video-conferencing systems enables the participants to share information on the task at one common place. Networks provide easy links across functional boundaries, the old walls between departments. Based on the case of Colorado's job seeker program, Bleeker (1994) shows that virtual organization colloaborative networks make it possible to draw upon vital resources as needed, regardless of where they are physically and regardless of who offers jobs.

Beaty (1988) asserts that crisis planning should be performed for the computer centers, major communications links from those centers, and for controller sites and nodes. The tremendous advancement of information technology enables the team to share the information even on the heterogeneous bases. As a crisis communication architecture platform, virtual organizations can support: integration with external data sources (such as relational databases, groupware, image and video servers, and the Internet) and shared data bases, which provide groups with a common workspace through which collaboration is supported. Specifically, using work-flow techniques to carry out a process and allowing people to work in parallel, rather than sequentially, groupware based on the Internet enables team members to share and collaborate on information, ideas, and illustrations quickly, accurately, and economically, with geographically dispersed teams.

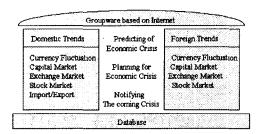
6.3 Flexibility vs. Easy-going attitude

The main cause of having an easy-going attitude, mentioned in this paper, is the extreme peace-pursuing attitude, i.e., the lack of flexibility. The inflexible structure of traditional Korean organizations can be changed by the flexibility which virtual organizations have had (McIntosh 1995). A virtual organization is so flexible that we can organize its shape in response to the situation at any time. It is possible that hundreds of people can crowd into a team and get scattered into their own positions. It is clear that flexibility, one of the characteristics of a virtual organization, can help reduce the easy-going attitude of traditional Korean organizations.

7. A Model of the Virtual Crisis Preparation Team

The only constant is change and crises will always occur. Lucas and Baroudi (1994) assert that the design of information technology is the design of organizations and that organizational designers should take advantage of information technology for designing new organizations. To prepare for the coming crises, we need to recreate and restructure a new organization concept based on the cases of existing virtual organizations. A number of firms have actively pursued the use of virtual organizations such as

Lockheed's Agile Cable Production Service (O'Leary et al. 1997). Chiesa and Manzini (1997) also show that dramatically different criteria are needed for creating and managing the virtual organization of R & D activities. Based on these cases, the following figure shows a model of a virtual economic crisis preparation team which can be adapted to prepare for the coming economic crisis.



<Figure 2> A Model of Virtual Preparation
Team for the Economic Crisis

To predict and prepare for the possible economic crisis, this team can be virtually organized by including experts scattered all over the world. This team can also have regular meetings by the predefined schedule to grasp the trends of the world economy on video-conference and to vote on and rank decision alternatives through the Internet. And each member of the team may be able to create and query data related to the crisis.

8. Limitations and Future Research

Although virtual organization is a new field into which many researchers are rushing, it can fail because of some factors such as violation of operating logic. 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 crisis preparation team should be regarded by an organization that is attempting to organize the team. And it is believed that how group defacilitators such as mistrust can be reduced in virtual

organizations needs to be continuously studied.

This article is focusing on the preparation stage, which is before the occurrence of a crisis. Accordingly, the question, whether a crisis team can be virtually maintained even after a crisis happens, or not, falls into a future research topic.

9. Conclusion

The economic crisis broken out in late 1997 has made Korean organizations take ordeals. But, besides the economic crisis of 1997, almost all crises not only can be identified but also must be prepared for. The lack of crisis-preparedness is largely attributed to the three vulnerabilities, which are tardy decision-making, closed information sharing, and easy-going attitude, that Korean organizations have possessed for a long It is suggested that the vulnerabilities be improved by transcendency, infiniteness, and flexibility, which are the three characteristics of a virtual CPT armed with information technology. And a model has attempted to show how the virtual CPT can predict the possible foreign currency crisis. Consequently, this article is intended to assist Korean government and companies that want to improve their preparation for a

Almost every crisis contains within itself the seeds of success as well as the roots of failure. Whether, or not, a crisis is to result in the success is determined by the preparedness. And, in crisis-prepared organizations, crisis management efforts are ongoing: they are evaluated, revised, and tested routinely. The better prepared we are, the more opportunities for success we will have. I wish that this article would contribute to the preparedness for a great number of crises which Korea has to take from now on.

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