On Sources of the Rigidity of Japanese Organizations: Why Japan is behind in IT Investment and Applications?

For the Conference "Towards a Sustainable Information Society for the 21st Century --Strategies, Research and Policy Actions"

Brussels, February 21-22, 2000

Hajime ONIKI

Osaka-Gakuin University, Japan

In this presentation, I will state my observation of an information characteristic of the Japanese society. In my view, this characteristic of the Japanese society, of with I will explain in more detail shortly, is a main cause of the difficulties encountered by the Japanese during recent years. They come from the rigidity of Japanese organizations, which has been blocking the reforms needed in the 21st century. I will also argue that Japan is not the only country with the characteristic; our East-Asian friends, Korea and Taiwan surely share it to the same extent that Japan does. I believe that many of the European countries have this characteristic, too (I would be pleased to listen to responses from my European friends). In this presentation, I will talk about this information characteristic mainly in relation to the difficulties of the Japanese society. The difficulties are felt by the Japanese in observing the slowness and the stickiness for the desirable reforms not to be taking place as quickly as desired. The point is that the way in which the Japanese organizations work makes it difficult to achieve an objective which is good to the society as a whole collectively but goes against the interest of individuals and private industrial sectors. Now, global sustainability is an objective which is good to the humankind as a whole but goes against the interest of individuals, of industrial sectors, and sometimes of countries. We need to consider not only what to do for global sustainability, but also how to do it in the presence of the discrepancy between the group objective and member interests¹. The remark that I am going to deliver in this presentation is hopefully useful to the discussion in this conference.

Let me start with examples of the rigidity of Japanese organizations. The first is the system of life-long employment. In a Japanese organization which is typical during the post-war period, it is customary for an employee to stay in his organization for a life-long period; in other words, it was very rare for a worker to change occupation from one company to another. This is called life-long employment, and is more common among college graduates and professionals than manual or clerical workers. For life-long employees, wages depend on the durations of employment, not on qualification or performance. A consequence of the life-long employment

¹ For a more detailed discussion on this point, see Mitomo and Oniki (1999).

system is the keen examination for college entrance, and a number of distortions of high school and lower level education. Another consequence of it is the domination of organizations by males; female employees are forced to choose between maintaining their career and maintaining their households with children. Thus, the system of life-long employment has generated a number of difficulties to the Japanese society such as the sharp decline of birth rates during resent years, generating a forecast that the Japanese population at the middle of the 21st century will be of a size of one half of the current population.

The next example of the difficulties of Japanese organizations is the fact that most Japanese organizations are vertically integrated and horizontally divided. It means that activities within an organization are conducted efficiently as long as the organization is well governed. However, it also means that inter-organizational activities are difficult to conduct. As a consequence, competing organizations often confront, not coorperate. When an employee works for a company, most of the employees of that company is considered to be his/her friends; on the other hand, those employees working for an organization competing with the organization he/she is working for are considered adversaries. Such a characteristic of Japanese organizations makes it difficult for a wide range coordination to realize. Thus, in Japan, small-sized organizations work well, but large-sized organizations (including the country as a whole) do not have the capability of effective decision making. From outside of Japan, this is seen as the irresponsiveness of the Japanese government to a request from foreign countries through the absence of effective international communications, not through a clear-cut rejection (such as the one seen in trade negotiations).

The rigidity of the Japanese society, of which I mentioned two typical examples, namely, the system of life-long employment and the system of vertically integrated and horizontally divided organizations, fitted to the development of the post-war Japanese economy very well. The main reason was that the post-war development of Japan was of what might be called a proportional expansion; there was little need for structural changes during that period. The main content of the economic growth was the expansion of manufacturing sectors such as automobile assembly, and the production of electronic appliances. The rigidity, however, does not fit to the changing environment in the 1990s and 21st century. In particular, Japan is behind other countries in the investment in information technology (IT) products. Further, there is a number of stresses, as seen repeatedly by media, in restructuring organizations, political, industrial, and in education, recently in Japan. The question is: "What are the factors having caused such rigidity of Japanese organizations?" Below, I will try to deliver an answer to this question by pointing out an information characteristic of the Japanese society.

To do this, let me first observe that the means in which society or an organization is operated is information. Individuals, members of a society or an organization, communicate each

other through information media to run the society or the organization. Thus, it is probable that the performance of a society or of an organization is heavily affected by the way in which information media are used there. In view of this observation, let me summarize and classify the information media used for operating a society or an organization. Please see List 1.

1. Low level:

Type A: informal	Type B: formal
Human voice including face	Letters, characters, symbols, numerals,
communication and gestures.	tables, lists, etc.

2. Medium level:

Type A: informal	Type B: formal
Direct conversations, dialogues, informal	Documents sent/received, distributed,
meetings, telephone conversations, video	exchanged; mails, electronic mails, web
telephones, video conferences, etc.	communications.

3. High level:

Type A: informal	Type B: formal
Voice agreements, implicit agreements,	Laws (acts), rules, orders, manuals,
social customs and understandings,	internal rules, contracts, written
common sense, implicit majority opinions,	agreements, documented records,
informal suggestions, etc.	databases, statistics.

<u>List 1:</u> <u>Information Media for Operating Organizations</u>

In the list shown above, I consider three levels of communication: low, medium, and high. In addition, I have classified the information means at each level into two types, type A and type B. Type A are informal means of communication; at the low level, a typical example is communication by human voice for direct conversation or for dialogues. At the high level, examples are voice agreements, social customs, implicit understandings, and common sense. In contrast, type B are formal means of communication. Examples of type B means at the medium level are documents sent and received, ordinary and electronic mails, and web communications. Those at the high level are laws (acts), rules, written orders and manuals, contracts, documented records, databases, and statistics. The basic point of my presentation is that the functioning of a society or of an organization is heavily affected by the way in which communications needed for the operation

depends on type A or type B means.

Now, I will explain the information characteristic of Japanese organizations with respect to the distinction between type A and type B means. It is a strong reliance by Japanese organizations on the informal (type A) means to run organizations. Such a reliance on type A means (and the less reliance on type B means) has generated direct and non-formatted agreements, emotional and intuitive understandings, a tendency to avoid logical and explicit expressions, rare use of conditional decisions, and the importance of generalists rather than specialists in many areas of social and economic activities.

I will now argue that the strong reliance by Japanese organizations on type A means of communication is a cause of the rigidity of Japanese organizations. It is easily seen that life-long employment is a way to avoid the cost of switching jobs or the cost of replacing workers. The reliance on type A means of communication implies that a large portion of the information pertinent to the operation of an organization is embodied in the workers of that organization. Hence, employers try to avoid replacing employees to save the cost of a new employee to accumulate the information from scratch, and an employee tries to avoid changing jobs not to waste the information he/she has accumulated in the organization for the period of employment. In contrast to this, if the information pertinent to the operation of an organization is expressed by type B means, such as documents and manuals, it is less costly to change jobs or to replace employees, since the information is not embodied in employees but exist in a form independent of particular human individuals.

The dominance of vertically integrated and horizontally divided organizations is an outcome from an effort to avoid the cost of maintaining proper relations with other organizations, i.e., to avoid the cost of inter-organizational adjustments. For large organizations or for complicated subjects, inter-organizational adjustments must be done by type B means of communication; the reliance on type A means would generate confusions and mistakes. Thus, if a society or an organization does not use type B means of communication, inter-organizational adjustments have to be given up². A result of this will be vertical integration and horizontal division, as seen in Japanese organizations. Another outcome is the slowness of group decisions. The absence of written rules for group decision making (i.e., the absence of type B means) slows down the speed of group decision making, particularly for cases in which conflicts of interest are present within a group.

One can explain the slowness of investment and use of IT products and services in Japan by the reliance on type A means of communication. The IT at the present time is a type B means of communication, as seen easily from the fact that most of the contents through web and mails are expressed by characters and illustrations; the use of human voice, particularly that of two directions,

² For a systematic discussion on this point, see Oniki (1999).

is still rare (telephone is a type A means of communication and it is widely used in Japanese organizations). Hence, in Japanese organizations, the most important of communication is direct conversations and meetings; the demand for IT products and services was not so strong as in the case in which the reliance on type B communication is heavier than in Japan. To this observation, I would like to add that Japan is strong in producing hardware products, but not so in producing software products. The reason can be explained by the reliance on type A means of communication Japanese organizations; software products (particularly business software) is a representation of logical and formal set of instructions for business activities, which is intrinsically of type B. (Note, however, that software products for games, animations, and Karaoke is well produced in Japan; they are basically of type A, not of type B.)

In my presentation, I have summarize my observation as to an information characteristic of Japanese organizations, which I have argued is a cause of the rigidity generating a number of difficulties in Japan during recent years; the characteristic is a strong reliance on type A means of communication in Japan. I consider it a shortcoming of Japanese societies; some efforts must be paid for overcoming it.

In concluding my presentation, I would like to present a hypothesis as to the degree of the reliance on type A and type B means of communication in Japan, EU member countries, and US. Please see Figure 2. My hypothesis is that, along the spectrum of degrees of reliance on type B means of communication instead of type A means, Japan is situated at the left-most point (low reliance on type B means) and US at the right-most point (high reliance on type B means). I think EU member countries are situated somewhere between the left-most and the right-most points. As I mentioned earlier, I would be pleased to listen to responses on this point. Let me finish my presentation by hastily adding that, in this presentation on the reliance on type A and type B means of communication, I have no intention to bring up patriotic prejudices or cultural discrimination whatsoever; the objective of my presentation was to contribute to the advancement of all the peoples on the earth for global sustainability.

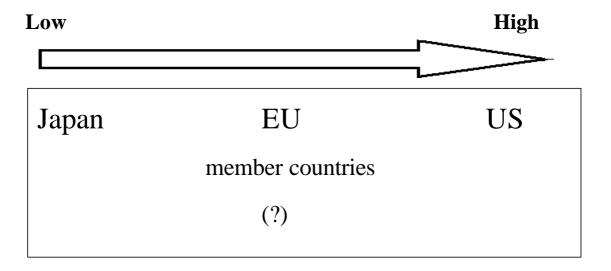


Figure 2: The Degree of the Use of type-B High-level media

Reference

Oniki (1999), "Japanese/US Comparative Advantage: Width and Depth of Co-ordination," A Chapter of *Information and Organization: A Tribute to the Work of Don Lamberton*, edited by S. Macdonald and J. Nightingale, 1999, Amsterdam: Elsevier Science B.V., pp.197-214.

Mitomo and Oniki (1999), "Information Technology for Sustainable Societies--Public Policy

Perspectives in Japan: A Case of Telework" (co-authored with Hitoshi Mitomo), *The IPTS Report*(edited by the Institute for Prospective Technological Studies (IPTS), published by the European Commission, Joint Research Centre), No.39, March 1999, pp.24-31. An outline was presented by Hajime Oniki at the PLATO Seminar of the FWSymposium, Poitier, France, March 1-5, 1999.