Value Creation through Organizational Learning

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ABSTRACT

There are two levels of organizational learning; (1) lower-level learning which refines on rule, and (2) higher-level learning which changes values. But, at the higher-level learning, there is a contradiction between the theories and actual cases of NTT Data in terms of value creation. In order to resolve this contradiction, this paper groups organizational values into two categories and then we propose two kinds of higher-level of learning: Business-higher-level learning and corporate-higher-level learning.

INTRODUCTION

Organizational learning is a process to improve actions through better knowledge and understanding about action-outcome relationships between the organization and its environment (Duncan & Weiss, 1979; Hedberg, 1981; Daft & Weick, 1984). There are two levels in the organizational learning. One is lower-level learning which leads to refining on rules. The other is higher-level learning which changes norms, values and world views (Fiol & Lyles, 1984; Schein, 1984). Higher-level learning can also bring about large innovations to organizations. Therefore, organizations under uncertainty require higher-level learning much more.

The literature on organizational learning has a consensus that higher-level learning starts from inquiries into organizational values. However, the definitions of values are still vague and various at present.

For example, Argyris & Schon (1978) regarded all sorts of values as organizational values, from relatively concrete values (like how to work) to very abstract values (like shared map). They described that there are two sorts of learning: Single-loop learning and double-loop learning. Single-loop learning is a kind of lower-level learning. Double-loop learning which is similar to higher-level learning is defined as a process to inquire into shared map and norms on which members of organization will act. In this process, each member and the organization should inquire into organizational theory-in-use, existing goals, previous context for learning, past success, and so on. All of these, including theory-in-use, are regarded as values, which are based on organizational shared map and affect organizational behavior. Where theory-in-use is a · way of thinking and values which is a basis of members' behavior when they do their tasks actually.

Fiol & Lyles (1984) gave some examples of higher-level learning as follows: new definition of direction and orientation, problem-defining skills, development of new

culture, and so on. It is clear that their values are overall-values which control organization and its members widely, rather than values closely related to each task. In fact, they explained that higher-level learning occurs mostly in upper levels of organization.

Duncan & Weiss (1979) conceived of organizational learning as a process of development of organizational knowledge. They did not mention the terms like higher-level learning or double-loop learning at all. However, they focused on values directly related to organizational task since knowledge has close connection with jobs and tasks in organizations. The organizational members should inquire into and sometimes deny the existing values related to tasks to realize higher-level learning.

From the above discussion, the range of values is very wide. Furthermore, we can find that different authors use the different definition of values to discuss organizational learning.

The purpose of this paper are as follows. First, we will group various organizational values into two categories: Corporate-values and business-values, and build a framework based on these categories for analysis of organizations, that is, we assume that there are two kinds of higher-level learning in organizations: Corporate-higher-level learning and business-higher-level learning.

Second, we will analyze an actual case of NTT Data by using this framework and test its validity. NTT Data has only reconfirmed the past corporate-values. It has not created new corporate-values. But the business-higher-level learning has accomplished distinguished results satisfactory to NTT Data. It has succeeded to create new business values.

FRAMEWORK

Burgelman (1983) explained that there are two kinds of strategic behavior. The behavior at corporate level and the behavior at business level. The former reflects corporate strategies, which are bases of organizations' existence. Since corporate strategies are important for the maintenance of corporate identity, top managers of organizations take the initiative and do their best to carry them out. The latter is the behavior which emerges from the bottom of organization autonomously. These two strategic activities effect each other and the good balance between them can bring hopeful results to the organization.

Thus, it is necessary to tell business-level behavior from corporate-level one. As a result, we concluded that it is more adequate to distinguish business-level values from corporate-level values when we discuss organizational learning and analyze organizations themselves. They are not same, and this distinction is very natural.

In this paper, we propose a framework that organizational values can be broken down into two levels: Corporate-values and business-values. Corporate-values are useful to unify the organization, and they also affect and control all of organizational behavior. They are represented by the orientation and vector of organization, norms, beliefs and business creed. Business-values, which are the second ones, are closely related to each task of organizations. As examples of them, there are the way of thinking about how to work and how to solve problems. Both have an effect on organizational behavior consciously or unconsciously.

In other words, we assume that there are two kinds of higher-level learning in organizations: Corporate-higher-level learning and business-higher-level learning. Because values into which members inquire to realize higher-level learning are different, it is natural to distinguish one from the other. Corporate-higher-level learning occurs

when members inquire into and sometimes deny the existing corporate-values and business-higher-level learning occurs through inquiries into the past business-values.

Since the definition of organizational values was vague and different among authors, the judgment about realization of higher-level learning also depends on authors. There are many cases that some authors would find out higher-level learning but others would not. This framework would resolve such problems, and clear up the contradiction between the theory of organizational learning and actual cases of firms. The following case of NTT Data is the typical one. This case contradicts a consensus that activities only to reconfirm the past values are not suitable for new value creation. In fact, NTT Data has not created new corporate-values but created new business values. The business-higher-level learning has accomplished distinguished results satisfactory to NTT Data.

CASE STUDY

NTT Data communication systems corporation, we call it "NTT Data" in this paper, is the largest firm in the information service industry of Japan. We will explain the contradiction between organizational learning theories and the case of NTT Data. Our two kinds of higher-level of learning, business-higher-level learning and corporate-higher-level learning, will resolve this contradiction.

The failure on CI movement

In the second half of 1980's, Corporate Identity (CI) movement has become very popular among Japanese companies in order to improve each company's image. In fact, many organizations made new corporate name and logotype through CI movement and some of them succeeded to build their new image. In addition, they would like to establish the corporate or organizational identity and to enhance their employees'

motivation. NTT Data also wanted to attain these objectives, because they had just separated from NTT and started as a new company at that time. NTT Data had to change members' minds to face with new environment and get it over.

NTT Data carried forward CI movement from 1987 to 1988. At the beginning, selected young members having enough business experience in various departments join the "working group" to reconsider the business creed of NTT Data. This working group made a thorough investigation on their own company by interview and a private questionnaire to all levels of the organization, from top to bottom.

Through this investigation, members of working group could understand strength and weakness of their company. Besides it, they got a trend of market and environment they faced with. At the same time, they knew the image of NTT Data about which external and internal people hold in their mind. After they examined these results very much, they set up business creed based on it and made a new symbol mark.

Although they accomplished parts of objectives, they were not content with that CI movement and outcomes through it. There were a couple of reasons of their discontent. First, members' motivations to improve company's image decreased rapidly after making business creed and almost disappeared when movement once finished. Members of organization and top managers felt regret because they expected the motivations to continue still after this movement had finished. Second, they could get only their new mark, business creed and some knowledge related to the experience of CI through this movement. Organizations usually make use of CI for much wider aims. If NTT Data tried CI to get only these things, it should have been enough to do Visual Identity (VI) movement instead of CI. Third, NTT Data surely made business creed and got the experiences of CI movement, but organizational members couldn't make good use of both to their daily tasks. To solve these new problems which occurred by CI, members of NTT Data decided to challenge a new activity again.

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The movement for reconfirmation of the existing values

Their new activity was a little unique because members of the organization made it by themselves. They developed their previous movement, CI, and also adopted the essences of Total Quality Control (TQC) to do the new challenge effectively. The adoption of TQC was decided by top managers. It is because they concluded that they needed some concrete means like TQC to embody their business creed, as a result of reflection of CI. This new movement at NTT Data was named Value Creation (VC) movement. Members of the organization have tried VC movement from April 1991 through July 1993. The main objectives of it were the penetration of business creed into every organizational members and the embodiment of it. In this case, the word "embodiment" means the condition which members understand business creed well and take good actions based on it autonomously. From these objectives, we make out that, by using VC movement, they tried to reconfirm what they have already had, and to improve organizational behavior through it.

Their first work was to improve a state of business creed. Although business creed was made just a few years ago, members were not aware of its existence already. Then, members tried to reconfirm their business creed, which says that their company will create values and provide it to customers and society. The clarification of business creed was one of the trials for it. Second, they introduced a new education system for penetration of business creed. To put it concretely, some key persons were picked up from various sections of organization at first. They were trained thoroughly by lecturer who was hired for it. After this training, it was their turn of educating other members. By using this way, members understood their business creed much better.

In addition to these, members improved the relationships between business creed and organizational goals, too. First, they made long-term goals between business creed and short-term and middle-term goals. They did not have long-term goals before and managed to do their tasks by only using short-term and middle-term goals. Second, they

coordinated these goals to be consistent with each other. In short, long-term goals were made on the basis of business creed, and short-term and middle-term goals were made by following to long-term ones. Fig. 1 illustrates the points of improvement which was done through VC movement.

Insert Figure 1 about here

Third, they challenged to win Deming Prize to connect three kinds of goals and business creed more closely. Deming Prize is given to the companies which challenge and acquire good effects by TQC. Because they adopted the essences of TQC, they decided to challenge this prize. This decision was also made from judgment that it was better to have a concrete and short target for which members embodied their business creed. Moreover, they had one more reason for this challenge. So far, companies in the manufacturing industry won Deming Prize mainly. Because their effects of TQC is easy to measure quantitatively, it is much easier to evaluate them than effects in the other industries. Although NTT Data is a company in the information service industry, they decided to challenge. As it was the first trial in Japanese information service industry, it was a kind of epoch-making event for everyone. Taking this new action was based on business creed, and it was suitable for the corporate image that external people held about NTT Data. They tried to increase their image that they were a future-oriented company by challenging Deming Prize. While they improved above these things, they carried out VC movement steadily.

When we examine these points which they improved, it is also obvious that VC movement was done for reconfirmation of the existing values in organization. We have three grounds of this idea. First, members made use of their business creed and the orientation of organization to carry out VC movement effectively. However, they were already made at the previous CI. So they did not create new things and only made use of

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the existing things for doing this VC movement. We can find a similar fact from this case as the second ground of our idea. It is the relationships between business creed and organizational goals. Although they had no long-term goals before and made them through VC movement, organizational goals were always made to have connection with business creed regardless of this movement. The relationships between them only get closer than before. Third, their characteristics and tendencies did not change by this movement. We have an evidence which present it. They made questionnaire surveys for member of this organization twice. The first survey was made just after the beginning of VC movement in 1991 and the second survey was made in 1994, which was after VC finished. These surveys asked members not only their minds in the organization but also their company's characteristics. Fig. 2 presents the outcomes of surveys about characteristics of NTT Data. When we compare the first time with the second like Fig. 2, it is clear that their characteristics and tendencies are almost same. In sum, the organizational values of NTT Data did not change basically before and after VC movement.

Insert Figure 2 about here

They say that it is quite difficult to create new organizational values in the existing ways and ideas. Following this, as VC movement was an activity for reconfirmation and reinforcement of the existing values, we can assume that it was not suitable for value creation. But is it true ?

According to the theories of organizational learning, creating new values needs to inquire into and sometimes deny the existing values. Or they say that it is necessary for this objective to instill new ideas, new knowledge and new viewpoints into members of organization. There are similar arguments and previous studies. For example, Schrage (1990) explained that collaboration, which is an interchange of different kinds of

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knowledge and viewpoints, is also useful to increase organizational creativity. By reconsidering same things from different viewpoints, members can bear better idea than before. Nonaka (1988) mentioned that organizations sometimes need to try even the "creative destruction" of existing values if they want to realize big innovations. As these previous studies present, many literature suggested that it is necessary for new value creation to inquire into the existing values and that activity for reconfirmation and reinforcement which NTT Data did as VC movement are unsuitable for value creation.

Value creation related to how to work

In spite of this consensus on previous studies, NTT Data succeeded to realize higher-level learning and create new values through VC movement. We will give a few examples of them.

The first example is value creation related to how to work. Before they tried VC movement, they believed that making products as customers demanded was the best way to increase their satisfactions. That is why they had done their best to grasp customers' NEEDS as exactly as they could, and tried to decrease inferior products and damages on products. However, it was not enough to be satisfied with their customers. Although they did not know the reason at first, they decided to change the way of thinking and how to work. VC movement enabled them to do it. They relearned their business creed and rethink what they should do for embodiment of it. As a result of it, they decided to regard the discovery and research of customers' WANTS as important. Their WANTS means the needs in customers' subconscious.

The main products of NTT Data are computer systems. When customers order it from them, they ask customers' requests fully. However, even customers themselves do not know everything they really want to and they do not notice a lot of their WANTS. The more the number of WANTS are, the more their satisfactions become down. Even if they know about themselves very much, and their NEEDS cover almost all of their

WANTS, another problems will happen. Building computer systems need high technical knowledge, and it is too complicated for ordinary people to understand them exactly. For these reasons, even if NTT Data made a system as customers demand, it does not necessarily fulfill its functions as they want to. In this case, it is also difficult to be satisfied with customers. In short, if members of NTT Data want to increase customers' satisfactions, they must realize customers' WANTS for it.

They finally noticed those things through VC movement. In other words, they inquired into the existing values which controlled organizational behavior and realized higher-level learning. This notice and change of a way of thinking was the first step for accomplishing business creed and three kinds of organizational goals which were based on it.

Insert Figure 3 about here

As they changed the way of thinking and organizational goals related to how to work like this, the process of making systems also changed. Fig. 3 presents this change. Before they did VC movement, they started to design and make systems after they received an order from their customer. It is natural that they tried to make it as customer demanded. However, as stated above, it is insufficient to obtain perfect customers' satisfactions. So they decided to improve this process. At first, they ask the customers their needs as before. Next, they ask them that what they want to do by using this system. It is to know their WANTS behind their NEEDS. After doing so, they go to their customers' office and learn their strategy fully. Furthermore, they take part in and observe the process that the customers try to put their strategy into practice. Through this observation and investigation, they work out the plan for making systems from the viewpoints that what systems are the best to make the most of strategy and to achieve customers' goals. Although the knowledge of this stage is too technical for customers to

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understand everything exactly, they hold a consultation with customers again and again and make systems. When customers complain about it or add another demands, of course, they incorporate those into the system. In this sense, we can regard this new process for making systems as a simultaneous one.

This change was very useful to look for customers' WANTS. They could learn how to make systems effectively under the condition which not only NTT Data themselves but also their customers have some constraints each other. When the values related to how to work changed, the process of work changed, too. These changes did not occur or develop from the existing way of thinking. As a result of study of the existing values through VC movement, they found that they needed to inquire into old, inadequate values to realize business creed and organizational goals. Including the occurrence of higher-level learning, all of them realized owing to VC movement.

Value creation related to problem-solving

In this paper, we will take one more example. It is value creation related to problem-solving. As Fig. 4 presents, there is a root-cause common to many problems besides direct causes, when a problem and an accident happens.

Insert Figure 4 about here

Before they tried VC movement, organizational members tried to find direct causes and did their best to solve them. Their main interest were to know what the causes of this problem are and to solve them effectively. In this way, though they could solve the problems temporary, they couldn't make the root-cause clear. If they can't make it out, they must confront similar problems again some day because they don't solve the cause of causes. It is no use for organization to continue the way. It is better to solve many problems which have the same root-cause all at once. For this reason,

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they shifted the way of thinking about how to solve problems: from HOW problems happened to WHY problems happened. This shift shows that they decided to solve problems thoroughly. We can find in this example that they created new values. It is necessary to describe the grounds of this judgment.

There are two main reasons why this shift happened. First, as members found out their own places of this organization and knew about what they should do for their organization and its goals through VC movement, they could solve some problems much more actively than before. These changes of knowledge and the way of thinking present that higher-level learning occurred here and that new value creation realized, because they had never had such ideas before. These changes were meaningful to activate minds of the members. When members don't know the orientation of their organization very much, they can't act voluntarily even if they want to. Likewise, when vectors of members' are different and not unified, their efforts will not bear fruits even if all of members do their best each other. That is why unifying organizational vectors is very important. It is one of the main purpose of CI. As VC movement was an activity which adopted the benefits of CI, they succeeded to unify them by making use of it.

Second, the penetration of business creed and their various values was completed and members shared organizational values again. They could have a consensus about making investing actions into the root-cause by it. Before they tried VC movement, there was an atmosphere, that there is no time to do such a thing hard, in this organization. Under such conditions, it was difficult for individual member to try to investigate into the root-cause of problems freely. It is natural that they couldn't take some actions for it autonomously before VC movement. All they could do in those days was to continue to solve the direct causes and to wait permissions to probe into causes much deeper. However, improvement of this support-system through VC movement enabled members to make an investigation of problems much more than before. Of course, this improvement also presents that they succeeded in higher-level learning and

new value creation related to problem-solving. It is because that they would not be able to improve it without new values and higher-level learning. And they would not be able to realize higher-level learning without VC movement through which they reconfirmed the existing values. After all, all of these effects were results of VC movement.

The validity of framework

As stated above, NTT Data brought about higher-level learning and created some new values through VC movement, which was an activity for reconfirmation of the existing values of organization. However, these effects seem to contradict a consensus that activities only for reconfirmation of past values are not suitable for new value creation.

We made a framework above. It explains that there are two different kinds of values in organizations: Business-values and corporate-values. By using this framework, we will reconsider this case and try to resolve this contradiction. The first example of value creation is related to how to work. They changed the way of thinking about making systems. Based on our framework, the values into which members inquired in this example are equal to our Business-values. The reason of this judgment is that the values have a close connection with their daily tasks. In the same way, the values of the second example can be regarded also as business-values because the problem-solving is a task itself. From these results, we make out that new values which NTT Data created through VC movement were business-values.

In contrast, they reconfirmed and reinforced the existing values through the same movement. These were values which related to the orientation and vector of organization like business creed. We can regard them as our corporate-values. In sum, the existing values which they reconfirmed and ones into which they inquired are not same. When this conclusion is right, the case of NTT Data never contradict a consensus on previous studies. Surely, members of this company could not create new corporate-

values as previous studies suggested, because they only reconfirmed the existing corporate-values and did not inquire into them. Instead of it, they inquired into their existing business-values and could realize both business-higher-level learning and new business-value creation.

As a result, we could resolve the contradiction between the actual case and theories. It is also clear that this framework is useful to analyze actual companies to some extent. These results suggest the validity of this framework.

DISCUSSION

Recently, it seems to give importance to corporate-value creation much more than business-value creation. It is same about relationships between corporate-higher-level learning and business-higher-level learning. That is why the evaluation of VC movement is not generally high. However, business-value creation is useful for organization as well as corporate-value. For example, they got over the recession, which occurred from 1991 to 1994, by only utilizing VC movement and business-values that they created through it. Although the period of VC movement just fell on the big recession, they improved even their performance. The change of thinking-way about tasks enables them to improve this thing. So they could not do it without business-value creation and business-higher-level learning. Even if they are business-value creation, they are useful for organizations.

In addition to it, trying to realize corporate-value creation and corporate-higher-level learning is not always the best choice for organizations. In the case of NTT Data, they chose to reconfirm and penetrate into the existing corporate-values, though they knew that they could not create new corporate-values in that way. For them, it was more important to understand their organizational values and to make out what they should do for their organization. It is because it makes members be able to take good

actions autonomously and accomplish their goals. The time they need corporate-value creation will come. However, it was not necessary for them to create corporate-values and to realize corporate-higher-level learning yet, in those days.

Insert Figure 5 about here

Fig. 5 presents the results of questionnaire surveys done by NTT Data. They asked about the condition of members' mind in the organization. From Fig. 5, we can find that VC movement, which created only business-values, had effects on members' mind fully. Their stress and anxiety decreased through this movement and their identification with organization also improved a little. As members could know their place in the organization and know about what they should do for organization, their mind in it improved like this. Owing to the improvement of members' mind, they could create business-values and realize business-higher-level learning. It is not always necessary to hope only corporate-value creation. It is the best way to realize the necessities when they want to get it.

Of course, there will be the case that organizations need corporate-value creation and corporate-higher-level learning for survival of themselves. Nystrom & Starbuck (1984) explained that it was very important to unlearn the existing values when organizations confronted crises. They did not distinguish business-values from corporate-values and regarded these two kinds of values as same one thing in their paper. However, it seems that they gave priority to unlearning of our existing Corporate-values.

Besides it, organizations have life cycles. It is natural that different stages need different value creations and different higher-level learning. We should consider life cycle of each organization when we study organizational learning and values. This is an another theme that we will try in the future.

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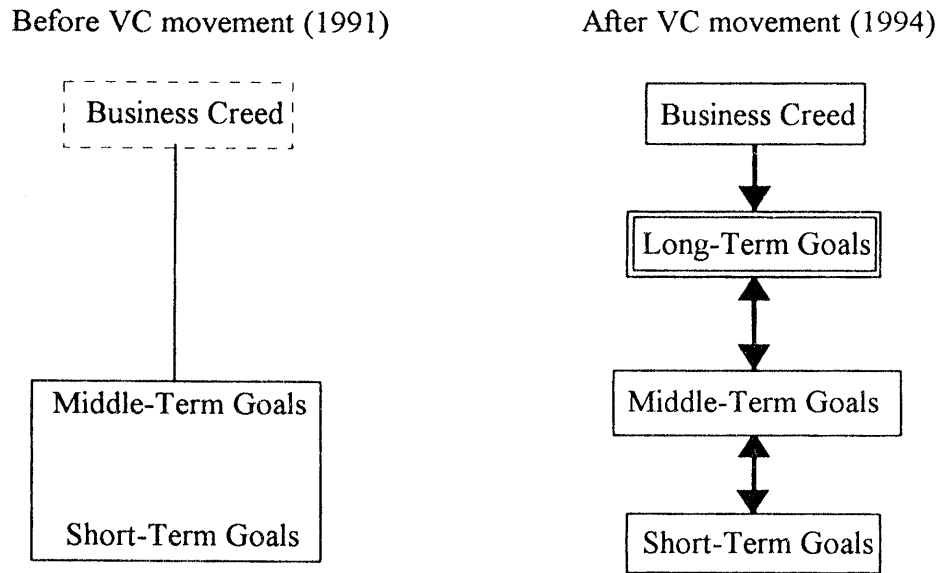Figure 1. The Relationships between Business Creed and Organizational Goals.

Before VC movement (1991)

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┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
│ Business Creed    │
└ ─ ─ ─ ─ ─│─ ─ ─ ─ ┘
           │
           │
  ┌────────┴──────────┐
  │ Middle-Term Goals │
  │                   │
  │  Short-Term Goals │
  └───────────────────┘
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After VC movement (1994)

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┌───────────────┐
│ Business Creed│
└───────┬───────┘
        ▼
┌───────────────┐
│Long-Term Goals│
└───────▲───────┘
        ▼
┌───────────────┐
│Middle-Term Goals│
└───────▲───────┘
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┌───────────────┐
│Short-Term Goals│
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Figure 2. Organizational Characteristics Evaluated by Members.

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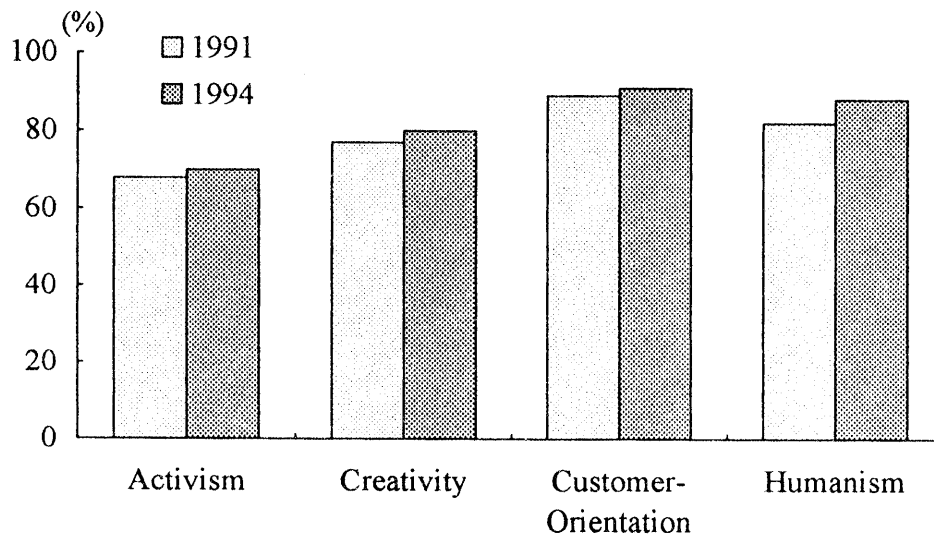
Figure 3. The Change of the System-Making Process.
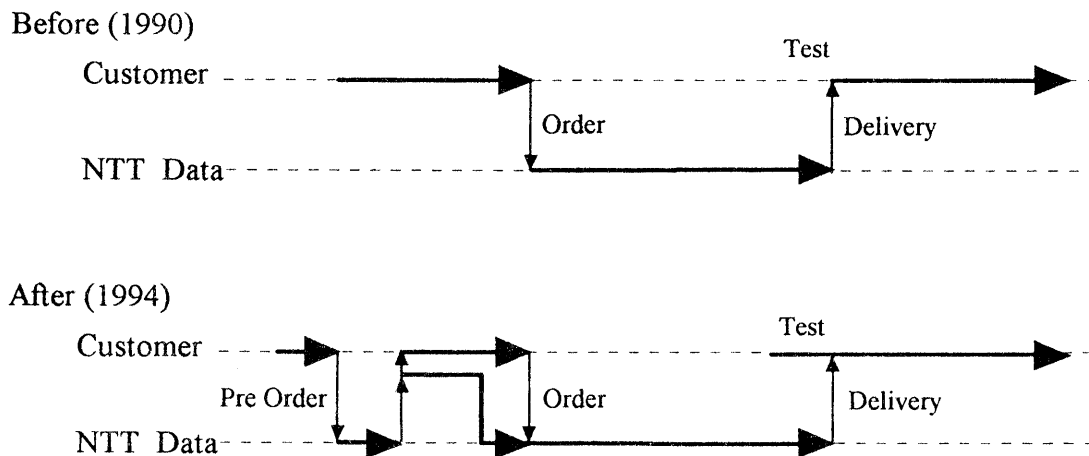
Before (1990)
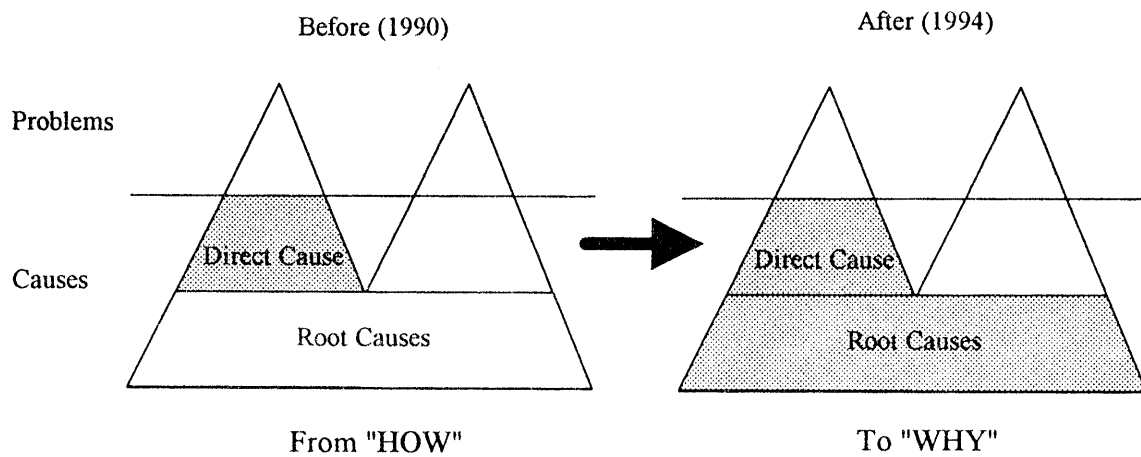

After (1994)

Figure 4. The Change of the Way of Problem-Solving.

Figure 5. The Decrease in Members' Stress and Anxiety.