

A Study of Typifying Role Grading Systems in Japanese Company

Naoki Senda

Abstract

In this paper, the author focuses on the concept of “role” which has been attracted attention rather than former “job” or “qualification” (by skill, knowledge) concept of the personal rating system in Japanese company in relation with the HRM (Human Resource Management) reformation by the viewpoint of performance-based system. It is described what role concept is and how it differs from job or qualification concept. This paper also suggests the concept of role is able to be classified into two types. One is the “alternation pattern” of the existing personal rating system, for example, qualification system. The other is the “redesigned pattern” which is based on specific job analysis and evaluation from a viewpoint of the value which is meaningful in competitive market in setting up the role grade. Furthermore, the author suggests the logic whether the type of the personal rating system reformation based on role concept is chosen depends on the viewpoint of “recognition of the necessity for the HRM system reformation,” with referring some examples of Japanese companies which introduced the role grading system in the personal rating system.

1. Introduction

After the 1990's, the environment which surrounds Japanese companies has been changed a lot and many Japanese companies came to the point to the HRM system reformation aiming at the breakaway from conventional Japanese management which became hard to maintain the competitive advantage as before. In the period of recession, it became pressing need for Japanese companies how they hold down the personnel expense which were enlarged in conventional seniority pay system and how they maintain and increase an employee's performance in severe competition they face today. This is what is called “the HRM reformation by performance-based system” in Japan.

This reformation has been attracted attention especially in the personal rating system

reformation as the existing qualification pay system (which is often regarded same as the seniority pay system) is regarded as the system having a demerit of high cost nature since the personnel expense could be enlarged regardless of their performance. It is the common recognition in the company which is carrying out the personal rating system reformation that the wage must be paid to worth of the result expected from their work instead of worth of just having the “skill” and “knowledge,” or worth of “person” itself as before.

However, it is not easy for a company to change the basic way of thinking, “for what to pay wages.” Nevertheless, performance-based system is caught like a catchphrase from the beginning of the 90’s, and the term “performance-based system” was used as fashion. Then, what happened was that not a few company faced a confusion or frailer in the HRM system reformation as a result of too rapid change without considering carefully about various influences which might occur to an organization. Therefore, there are still many pros and cons argument about performance-based system in Japan.¹⁾

From these facts, the author focuses on role concept which is attracted attention instead of job or qualification in this performance-based system reformation boom that was seen in the early 90’s.

There are two reasons why the author focuses on role concept. One is that many Japanese companies have tackling to reconstruct the HRM system using the concept of role as to substitute for job or qualification concept. The other is that it is observed the number of Japanese companies which adopts role concept to make new personal rating system in an organization has been increasing in recent years.²⁾ With these facts, it is important to consider role concept and to clarify the HRM reformation with that concept in revealing what is going on in contemporary Japanese management.

In the next section, the definition of role concept is considered and the difference between role and job or qualification is also discussed. In section 3, it is indicated that role concept (and the personal rating system reformation based on role) is able to be classified into two types with referring to the data published by *Rosei Jiho* to see what kind of personal rating system reformation is introduced in fact. Then in section 4, the logic of which type of the personal rating system reformation based on role is chosen is described. The logic of it is discussed from a viewpoint of “recognition the necessity for the HRM reformation.”

2. The concept of “Role”

From below, it will be described what the concept of role is. Role concept itself is not a concept which has been attracted attention only in recent years. For example, it is already indicated that “the worker’s role enlarges as the job diminishes” and “the notion of role has come into prominence and is displacing job as a central concept in the “at work” relationship” (Davis and Taylor, 1979: xiii).

As already stated, not only for Japanese companies, there has been severe competition in global business environment. Many Japanese companies faced the situation that they are not able to remain undefeated to competition in carrying out rank of the employee based on the capability and the result which are called for inside an organization and treating the employee with its ranking. A big change has been taken place as global competition has become severer. They must rank and treat employees based on the exertion of the capability and result expected in the market instead of just having the capability.

That is, work should not be assigned to employees downward from top of an organization as before. For example, Ishida (2003: 186) mentions that “A company is not able to compete unless they set up the role which is expected in the market for every employee, not just in an organization.” From this point of view, a job which is taken up as one another important factor in the study of performance-based system is specified inside an organization and assigned downward. In addition, unless making new jobs descriptions and making new jobs, the value of a job is fixed. With this point, role differs from job and qualification in the basis of how they are defined and assigned to the employees.

Furthermore, since role must be deductively caught from the market, one’s role might be changed according to the change of the market environment.

That is, worth of a fixed job or capability is almost meaningless in the viewpoint of role concept. Even if a capability values to be at a certain point, that value of a capability might be lost once the business environment changes. Therefore, it is almost meaningless for an employee just to “have” a capability and there is not much meaning in a certain job itself either. From these points, performance-based system and role concept are conformity-like in the meaning that both concepts have its basis to catch the result expected in the market.

It is more acceptable for Japanese companies to carry out the personal rating system reformation based on role rather than job. Because, in setting up the role, the important matter is

who plays the role and what is expected for him or her in the market, not what kind of a job which he or she does. There remains a certain similarity between role and qualification in the meaning that role concept has a certain amount of man-oriented point of view to some extent compared with job concept. "Since role remains the basis of "man," it is easy to accept for Japanese companies and it fits with development of the employee's capability. Role was thought out as a concept which is able to respond to the regulation of the "demand side." Therefore, they are able to avoid specifying jobs to set up the job grading system which is unfamiliar to Japanese companies." mentions Ishida (2006: 51).

As mentioned above, a job is specified inside an organization and is assigned from a top of an organization while a role is deductively assigned from the market needs. But in order to fulfill the needs from the market, it is also called for that employees extend the role activity themselves.

The companies which adopt the personal rating system based on role define role concept variously. For example, Hotta (2001: 43) mentions that it is able to describe that a role is the thing of which the degrees of challenges, such as expansion, innovation and so on of business are added to the duties which are the responsible on their position, rank and a job. In other words, in addition to the fundamental important matter for which a company and an organization ask employees according to their position and rank, a role is another important matter expected to be assigned or extended by employees themselves to correspond to environmental changes promptly or for the improvement of a company, an organization and employees. This point is also able to be referred to as being the important difference from the personal rating system based on job. Hotta also mentions that in spite of having introduced performance-based system like a boom after the 90's, some companies carried out different handling from the original aim of that system. As a result, it has functioned in the direction opposite to the original function of it. The one reason for that is the tendency just to assign a job to an employee was very strong in a company in spite of announcing that it was the principle of an employee's self-responsibility. In other words, the dissatisfaction of employees was arisen and the fall of morale was occurred by introducing such a wrong performance-based system.

In this section, the features of role concept and the difference between role and job or qualification were described. A job is to be assigned by inside needs of an organization and its value is fixed. On the other hand, a role should be assigned by the needs deductively from the market, not only by the need in an organization. Another point of role is not only an organization

but an employee also has to participate in assigning a role.

Furthermore, it is suggested that role has the possibility to reduce the rigidity which job concept has or to avoid high cost nature which qualification concept has, since it is a premise that an employee's capability continues to increase and it does not deteriorate no matter what in the existing qualification system. With role concept, it is able to be flexibly adapted with environmental change since a role is lead deductively from the market needs. Moreover, an employee will feel more conviction and satisfaction since a role is not the thing only being assigned from top like a job but also an employee participates together in assigning a role. In the personal rating system based on role, it's almost meaningless just to have a capability. The capability which is expected in the market must be demonstrated and must make the result which is expected. Thus, the personnel expense will not become upward rise as qualification system.

These mentioned above are considered for the reason why role attracts as an alternate concept of work for Japanese company today and the number of the companies which adopts the personal rating system based on role as the HRM reformation is increasing after the 90's.

3. The typology of “role” concept

3.1. Two types of “role”

In this section, it is described how the personal rating system based on role is actually set up. There seems to be various type of personal rating system based on role in each company. But the result in which the author observed the examples of some companies published in *Rosei Jiho* which carried out the personal rating system reformation based on role shows that these role grading systems are able to be classified into two types except for some minor differences (for example, the name of the system). The first type is setting up the role grade with alternation of the existing qualification system which is named as the “alternation pattern.” The other type is setting up the role grade which does not depend on the existing qualification system but newly set up the role grade through detailed job analysis, evaluation and so on. This is named as “redesigned pattern.” More briefly, it is the difference whether the role is set up by reusing existing system or newly set up. From this classification, it is able to be point as the question why such a difference occurs in setting up the role grading system when observing some examples of Japanese companies.

The reason why the author puts emphasize on this classification of role is that many Japanese companies have tried to shift the basis of the personal rating system to role as mentioned

already. However, there is still various way of setting up the role grade in each company yet to be arranged from academic viewpoint. Thus, to classify these various role concepts more simply is one important step to understand the actual changes of the HRM system in current Japanese company.

In next paragraph, some examples from *Rosei Jiho* are classified as indicated above and the features of these two types of the role grading system are also described.

3.2. The classification of role grading system

In this paper, 13 companies which carried out the personal rating system based on role are picked up from *Rosei Jiho*. They are Cannon Marketing Japan, Kawasaki Heavy Industries, Mitsubishi Pharma (Tanabe Mitsubishi Pharma in present), Mitsui, Nippon Steel, Nippon Suisan Kaisha, Nisshin Flour Milling, Nissho Iwai (Sojitz in present), Sankyo (Daiichi Sankyo in present), Sumitomo Insurance (Mitsui Sumitomo Insurance in present), The Daimaru, Tokyu Livable, and Toshiba Engineering (Toshiba Plant Systems & Services in present).

They are classified as below according to two types of the role grading system.

(1) The “alternation pattern”

Kawasaki Heavy Industries, Mitsui, Nippon Steel, Nisshin Flour Milling, Nissho Iwai (Sojitz in present), Sumitomo Insurance (Mitsui Sumitomo Insurance in present), Tokyu Livable, Toshiba Engineering (Toshiba Plant Systems & Services in present).

(2) The “redesigned pattern”

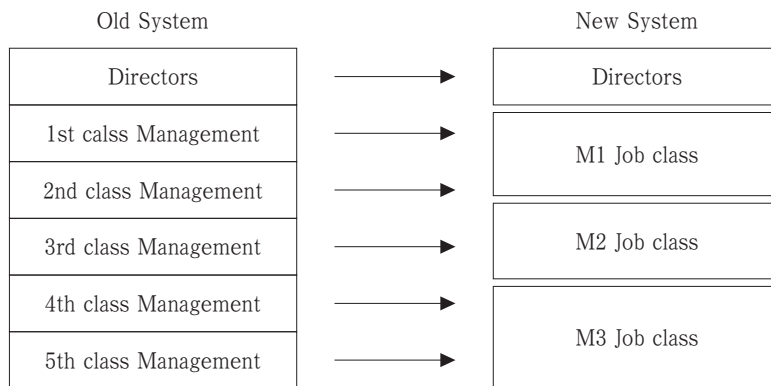
Canon Marketing Japan, Mitsubishi Pharma (Tanabe Mitsubishi Pharma in present), Nippon Suisan Kaisha, Sankyo (Daiichi Sankyo in present), The Daimaru.

As the basis of a classification, if a company uses the existing qualification system to modify in setting up the role grading system or uses both of the qualification system and role grading system, it is classified into the “alternation pattern.” On the other hand, the case which the role grading system is set up through newly analyzing jobs and results expected in the market in detail without depending on the existing qualification system is classified into the “redesigned pattern.”

According to this classification, more detailed features and differences in these two patterns are described below from observing some examples of each pattern.

In the “alternation pattern,” a company reuses and modifies the existing qualification system and set up the role grade on forming existing qualification grade into broad-banded. In the case of Nissho Iwai (Sojitz in present), the conventional qualification grading system was abolished, and the “shokugun (job class)” system based on the expected role and result was introduced. But it seems to be the broad-banding of the existing qualification grading system after all. (See Figure 1.)

Figure 1 The Image of the “shokugun (job family)” system in Nissho Iwai.

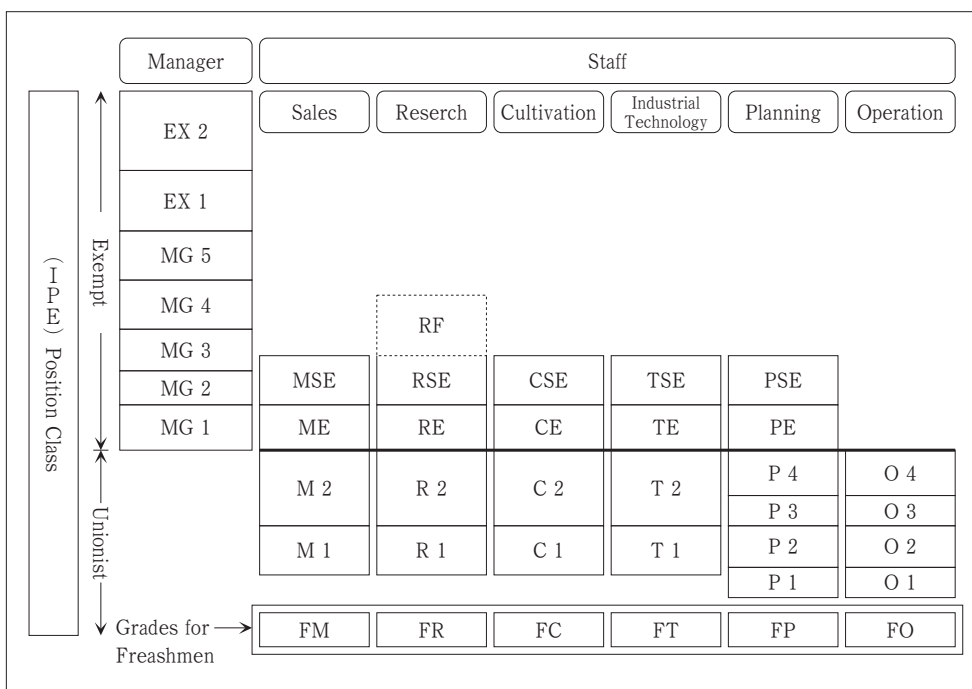


Source: “Nissho Iwai,” *Rosei Jiho*, Vol. 3471, p 9.

In this system, definition of the shokugun (job class) and the expected result and role are described first. Then the image of the rough position is applied for each shokugun (job class) except for directors. However, the shokugun (job class) level and the position level do not necessarily need to be connected strictly. Being expressed as “rough” is from this meaning. The employees are classified into these shokugun (job class) according to this system.

For another case, in Tokyu Livable and Nisshin Flour Milling, the qualification system itself was not abolished. They use both the qualification and the role grading system together. The common recognition of these two companies was that they still want to leave a certain amount of stability about the order of the organization which the existing qualification system had (for example, the flexibility in a personal reshuffle), though they aimed to abolish the seniority treatment in the conventional qualification system. Moreover, another common feature of these two companies is the implementation of the new grading system is carried out stricter than before of the personal rating system reformation especially for promotion and demotion, even though they left the conventional qualification system itself. In the role grading system,

Figure 2 The image of the “job grade” system in Mitsubishi Pharma.



Source: “Mitsubishi Pharma,” *Rosei Jiho*, Vol. 3629, p 20. (Some parts are omitted by the author.)

the value of a role does not rise up automatically while the qualification system had a premise that a capability of an employee continuously increases and does not deteriorate. Thus, not only promotion but also demotion does occur which had not been seen very frequently former Japanese companies. This is one of the important differences between the role and qualification grading system.

In the “redesigned pattern,” it is a pattern that each role is set up through more detailed analysis of the job and result which is called for in the competitive market where the company takes part in, compare with the “alternation pattern.” Since time, effort and the technical knowledge are needed such detailed analyses, there are some companies which use the external consulting organization besides they do it themselves. (For example, Sankyo [Daiichi Sankyo in present], Mitsubishi Pharma [Tanabe Mitsubishi Pharma in present]) With this kind of detailed procedures, the role grading system tend to be more complex and have various grades in each occupational description compared with the “alternation pattern.”

Figure 2 shows one example of the “redesigned pattern” with plurality grades for each

occupational description.

Mitsubishi Pharma (Tanabe Mitsubishi Pharma in present) has adopted “job grade” system based on quite detailed job analysis using the job evaluation technique of the external consulting company. Firstly, they clarified role classification of the staff layer with management layer. Then, for the staff layer, the plurality grades are set up for six occupational descriptions which are sales, research, cultivation, industrial technology, planning and operation.

With this detailed analysis and subdivision of setting plurality role grades, the role for each employee in each occupation is able to be clearer and more appropriate, even though it takes amount of time, effort and cost.

As for the brief summary of this section, it is described that there are two types of classification by the process of setting up the role grading system and the features of each type with observing some examples of Japanese companies. From this classification, the question why these differences are observed in adopting the personal rating system reformation based on role is yet to be considered.

4. Discussion

In this section, the question mentioned above is discussed from the viewpoint of “recognition of the necessity for the HRM reformation” for a company in choosing the pattern of the personal rating system reformation based on role.

4.1. Recognition of the company which chooses the “alternation pattern”

In the company which chooses the “alternation pattern,” it is considered that recognition of the necessity for the HRM reformation is relatively low compared with the company which chooses the “redesigned pattern.” For example, the industry characteristic, the market environment and so on might be pointed as the factors that affect their recognition. But no matter what the decisive factor that affects their recognition is, the personal rating system reformation will be ended up to be the alternation of the existing system that mainly aims to diminish the demerits of existing system (for example, the high cost nature of seniority treatment) rather than introducing new system with paying amount of cost, time and effort. They see role concept as the tool to diminish existing demerits. Even though they aim to diminish the demerits of old system, too rapid and dynamic change in the HRM system might occur the disorder and confusion in an organization. But it is also dangerous to leave the existing HRM system and let

the personnel expense rise up continuously just to maintain an organizational order since the high growth period has been over in Japan.

Thus, the “alternation pattern” is able to maintain the balance of diminishing demerits and leaving the stability to some extent of organizational order which the old qualification system had. With this point, it is able to be indicated that the “alternation pattern” is more suitable for the company which has lower recognition of the necessity for the HRM reformation.

4.2. Recognition of the company which chooses the “redesigned pattern”

On the other hand, in the company which chooses the “redesigned pattern,” they reform the personal rating system with taking long time and effort for analyzing in detail to set up the role grade since they have relatively higher recognition of the necessity for the HRM reformation compared with the company of the “alternation pattern.” The possible reason for this is that the main purpose of the personal rating system reformation based on role is to change to the organization which is able to maintain and gain competitive advantage and to enlarge organizational performance more rather than just diminishing the demerit of the existing personal rating system. When tackling personal rating system reformation with such recognition, the decisive purpose is set at the point how the result of the whole organization is able to be increased. With this point of view, to maintain and gain competitive advantage, they should be more conscious of the result expected in the market rather than the company of the “alternation pattern.” Thus, the company should also make their employees be more conscious of the result from their work than before the system reformation.

However, in order to measure the result, the result expected in a certain period needs to be shown clearly to the employee beforehand. That is, the work of defining and clarifying the job and expected result will become more important in setting up the role. From these points, the “redesigned pattern” is considered as suitable for the company which has high recognition of the necessity for the HRM system reformation when tackling the personal rating system reformation based on role.

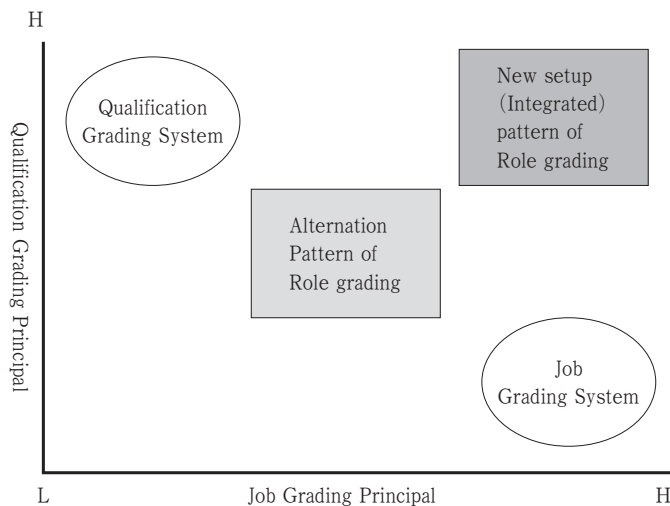
In the “redesigned pattern,” the company considers role concept and the personal rating system reformation based on role as the strategically important matter for the organization to maintain and gain competitive advantage, not just to eliminate the negative effect of the existing system. When considering role concept from the strategic viewpoint, it is able to be considered that role concept and the HRM reformation based on role have some relation with SHRM

(Strategic Human Resource Management). The HRM reformation that currently performed in Japanese company after the 90's might be able to describe more logically with the viewpoint of "strategic system reformation" in some SHRM theoretical framework, although, in general, it is often indicated that many Japanese companies were forced to change their old Japanese way of management due to the economic recession which had lead them unable to maintain conventional Japanese way of personnel management with its high cost nature.

4.3. Two types of Role grading system

From the comparison of these two patterns of the necessity for HRM reforms, there is a significant difference found between their role grading systems. An alternation pattern is regarded grading systems as trade-off concept between "job grading" and "qualification grading." From this viewpoint, the role grading is designed as compromised of "job" and "qualification," in other word intermediate pattern. On the other hand, a redesigned pattern is regarded grading system as a new base of grading principal that "job" and "qualification" are highly integrated.

Figure 3 Two different types of Role Grading Concept



The next point to be considered is why the company that aspires to the redesigned pattern should integrate both job grading principal and qualification grading principal. One thing that is inferred as the reason is the intensification of global competition that requires companies more ex-post response to environmental changes and variations.

Galbraith (1977) refers that there are two ways for corresponding to ex-post responses. The one is decreasing the amounts of information that should be handled, and the other is increasing the skills to handle the large amount of information. Uncertainty is occurred and increased by the gap between the information that is required to execute their task and information they own in the current situation (Galbraith, 1977, pp. 36-39.)

Job grading system is an attempt to decrease information that should be handled ex-post fact. Job descriptions are aimed to be written with assuming the information to be handled beforehand as much as possible. On the other hand, qualification grading system contributes the employees develop the skills to handle the unexpected changes and extra tasks that should be handled afterwards. Therefore, qualification system is able to be considered as the system that increase the skills to handle more ex-post matters, while job grading system is for reducing the information that should be handled afterwards.

Many Japanese companies had possessed the competitive advantage by developing the ability of ex-post correspondence with qualification system based career development. But the amount of information that is to be handled as ex-post correspondence has steadily been increased in contemporary global competitive environment. This fact implies that the organizations are no longer handle the ex-post changes with the ordinary way of qualification grading system. However job grading system has its limitation to decrease every possible uncertainty beforehand because of the “incompleteness of employment contracts” (Marsden, 1999.)

In addition, it is difficult for many Japanese companies to shift their grading system completely to job grading system and abandon qualification system because of its path dependency of HRM system.

Therefore, it is inferred that some Japanese companies choose not only to change their grading system simply to job grading but also aspire to retain the superiority of ex-post correspondence. From this viewpoint, companies that aspire to redesigned pattern of role grading system are aiming at cherry pick of both way of reducing uncertainty that Galbraith (1977) mentions. In other word, corresponding competitive environmental changes both beforehand and afterwards. It should be highly integrated pattern of job and qualification system, not the compromised mix, to maintain the advantage of the reduction of uncertainty (by job grading system) and increasing skills of handling ex-post corresponding (by qualification system.)

It is assumed that companies that has been faced the necessity of HRM reform have more severe information overflow problem caused by intensified competitive environment.

5. Conclusion

From the discussions above, the following four points are mentioned as a conclusion of this paper.

- (1) In Japanese company, the concept of “role” has been considered as new or alternation concept of “job” or “qualification” in relation with the viewpoint of performance-based system. The difference between them is that the role is set up with the basis of the result expected in the market, while the job and qualification are set up with the basis of inside needs of an organization.
- (2) The personal rating system reformation based on role is able to be classified into two types. One is the “alternation pattern” which is set up by reusing and modifying the existing personal rating system. The other is the “redesigned pattern” which is set up with quite detailed analysis and procedure.
- (3) “Recognition of the necessity for the HRM reformation” is indicated as for the reason why such different types are observed in the personal rating system reformation based on role in Japanese company. In the company with low recognition, they put emphasize on diminishing the demerit of existing system. The “alternation pattern” is more suitable for such a company. Conversely, in the company with high recognition, they put more emphasize on maintaining and gaining competitive advantage and increasing organizational performance by adopting the personal rating system reformation based on role rather than just diminishing the demerit of the existing system. The “redesigned pattern” is more suitable for such a company.
- (4) There are two type of role grading system. Both two are combined system of job and qualification system. The key difference is the degree of the integration. Due to the global competitive environment in recent years, highly integrated role grading system might be one of new and effective grading system because of the superiority that covers both pre and post corresponding of work with steadily increasing large amount of information to be handled.

There are some limitations of this paper and tasks left for the future research. First, it is explained that “recognition of the necessity for the HRM reformation” is the factor for a company

which affects whether the “alternation pattern” or the “redesigned pattern” is chosen in the personal rating system reformation based on role. However, it was not fully explained the reason why that is able to be described as the factor for a company to affect their choice with empirical evidence. To substantiate the logic that is discussed in this paper, further empirically research of Japanese companies that adopted personal rating system reformation based on role is necessary.

In addition, this paper does not mention why such a difference of recognition of the necessity for the HRM reformation occurs and what factors that determine the recognition of the company are. To specify this is also essential for supporting the theory discussed in this paper and further research of role concept.

Moreover, this paper pointed out the possible superiority of integrated pattern of role grading system. The integrated pattern of role grading system might be suitable for Japanese companies to maintain the competitive advantage because that system has certain advantages both decreasing uncertainty and increasing skills to handle large amount of information occurs in contemporary global competition. But further researches are required to verify if this role grading system is able to be a new valid system for Japanese company.

Notes

- 1) For example, Abe (2006), Imano (1998), Takahashi (2004)
- 2) According to the static of *Shakai Seisansei Honbu* (2007), the introductory ratio of “pay for role or pay for job” in a management layer has been increased from 21.1% to 61% through 1999 to 2001.

References

- Abe, M. (2006) “Seikasyugi Donyuno Haikei to Sono Kouzai” (Merits and demerits of introducing performance-based system,) *Nihon Roudo Kenkyu Zasshi*, Vol. 48, No. 9: 18-35.
- Davis, L. E. & Taylor, J. C. (1979) “Overview,” in Davis, L. E. & Taylor, J. C. (eds.), *Design of Jobs*, 2nd ed, Santa Monica, CA, Goodyear Publishing Company: x-xxi.
- Galbraith, J. R. (1977) *Organization Design*, Reading, Mass.: Addison-Wesley.
- Hotta, T. (2001) “Jinji Seido ni Okeru “Yakuwari” no Ichizuke to Sono Katsuyo” (The meaning of the “role” and its practical use in personal rating system,) *Rosei Jiho*, Vol. 3495: 43-49.
- Imano, K. (1998) *Kachinuku Seikasyugi* (Survive in pay system reformation,) Nihon Keizai Shinbunsha.
- Ishida, M. (2006) “Chingin Seido Kaikaku no Chakuchi Ten” (The landing site of pay system reformation,) *Nihon Roudo Kenkyu Zasshi*, Vol. 48, No. 9: 47-60.
- Marsden, D. (1999) *A Theory of Employment System: Micro-Foundations of Societal Diversity*, Oxford:

Oxford University Press.

Shakai Seisansei Honbu (2007) "Dai 10 Kai Nihonteki Jinji Seido no Henyo ni Kansuru Chousa Kekka Gaiyo" (The outline for the results of the 10th investigation about the change of Japanese personal rating system.)

[<http://activity.jpc-sed.or.jp/detail/esr/activity000806/attached.pdf>]

Takahashi, N. (2004) *Kyomo no Seika Syugi* (The falsehood of performance-based system,) Nikkei BP sha.

Roumu Gyosei Kenkyusho (1999) "Sumitomo Insurance," *Rosei Jiho*, Vol. 3395: 24-32.

Roumu Gyosei Kenkyusho (2000) "Kawasaki Jyu Kogyo," *Rosei Jiho*, Vol. 3451: 18-32.

Roumu Gyosei Kenkyusho (2000) "Mitsui," *Rosei Jiho*, Vol. 3471: 33-40.

Roumu Gyosei Kenkyusho (2000) "Nissho Iwai," *Rosei Jiho*, Vol. 3471: 6-17.

Roumu Gyosei Kenkyusho (2001) "Nippon Steel," *Rosei Jiho*, Vol. 3481: 49-55.

Roumu Gyosei Kenkyusho (2001) "Nisshin Flour Milling," *Rosei Jiho*, Vol. 3495: 4-13.

Roumu Gyosei Kenkyusho (2001) "Tokyu Livable," *Rosei Jiho*, Vol. 3495: 24-32.

Roumu Gyosei Kenkyusho (2001) "Toshiba Engineering," *Rosei Jiho*, Vol. 3495: 33-42.

Roumu Gyosei Kenkyusho (2004) "Mitsubishi Pharma," *Rosei Jiho*, Vol. 3629: 16-33.

Roumu Gyosei Kenkyusho (2005) "Nihon Suisan Kaisha," *Rosei Jiho*, Vol. 3657: 8-25.

Roumu Gyosei Kenkyusho (2005) "Sankyo," *Rosei Jiho*, Vol. 3657: 26-45.

Roumu Gyosei Kenkyusho (2006) "Canon Marketing Japan," *Rosei Jiho*, Vol. 3673: 27-41.

Roumu Gyosei Kenkyusho (2006) "The Daimaru," *Rosei Jiho*, Vol. 3673: 42-55.