A Career Management Strategy That Addresses Aging—Implications of the Survey of IT Engineers

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Aging of the labor force is compelling companies to boost the job performance of employees of all ages through training and development programs. Based on a survey of IT engineers, we propose a broader career management strategy to overcome the effects of aging on job performance.

1. Why Aging Matters in Career Management

As birthrates slide and aging advances, the labor force is not only shrinking but changing in age composition. Between 2004 and 2015, the proportion of young workers (aged 15 to 29) is projected to shrink from 20.9% to 17.5%, while the share of older workers (aged 60 and over) will grow from 14.5% to 17.3%.[1]

Moreover, under the revised employment stability law concerning elderly persons, companies will have to retain employees until age 65 by introducing one of the following measures by April 2006: (1) raise the mandatory retirement age, (2) introduce a retention program, or (3) abolish the mandatory retirement age.[2]

Most companies can expect to see an increase in older employees and decrease in younger employees. This makes it all the more important that they train and develop productive human resources regardless of age.

Of course, the correlation between age and occupational skills is not fixed. Some skills deteriorate with age, while other skills improve. But as employees age, there tends to be a growing mismatch between the skill sets demanded by companies and those supplied by employees. Moreover, a persistent mismatch can threaten to damage morale.

Clearly, career management is an essential factor in overcoming this problem. As a participant in the Project to Promote Employment of Elderly Persons in the Information Service Industry, the author examined career management strategies to enhance the performance of all IT engineers.

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[1] Labor force data for 2004 is from Ministry of Internal Affairs and Communications, *Labour Force Survey*. The labor force projection is from the Employment Policy Research Committee of the Ministry of Health, Labor and Welfare, *Employment and Labor Policy Issues Amid the Decreasing Population* (July 2005). The projection assumes that labor force participation rates remain at present levels for the elderly, women and young persons.

[2] In the revised law, the mandatory retirement age will be gradually raised from age 62 to 65 by 2013, in step with the pension age for the fixed portion of the Employees' Pension Plan.

The project was commissioned by the Japan Organization for Employment of the Elderly and Persons with Disabilities, and conducted by the Japan Information Technology Services Industry Association (JISA) in fiscal 2002 and 2003.

Since IT engineers must continually upgrade skills and stay abreast of rapid technological change, their occupation tends to be viewed as being incompatible with aging. However, IT engineers actually continue to perform surprisingly well as they age. By examining the career management requirements to remain competitive in this grueling occupation, we hope to uncover important implications for other occupations as well.

Based on the project's findings, this paper presents recommendations to enhance career management and sustain job performance in old age.[3] The term career management is used to include the development of skills, human resource deployment and transfer decisions that affect career patterns, and a suitable compensation system.

2. Relationship of Age and Performance

The first part of the project consists of interviews with HR managers and on-site managers regarding factors that distinguish good performers from poor performers, and measures to enhance performance.[4] The second part consists of questionnaires for managers regarding work environment factors that enable IT engineers to perform well regardless of age.[5]

We first look at how managers assess the performance of their IT engineers, and consider the relationship between performance and age.

According to the questionnaire results, 88.3% of managers have IT engineers in their charge (new graduates with at least three years of work experience) who perform below expectations (excluding IT engineers who are project managers). Of the underperforming subordinates, the largest age group is the 30s cohort at 38.8% (Figure 1). Among managers with project managers in their charge, as many as 65.1% (53.5% of all managers) have project leaders who perform below expectations.

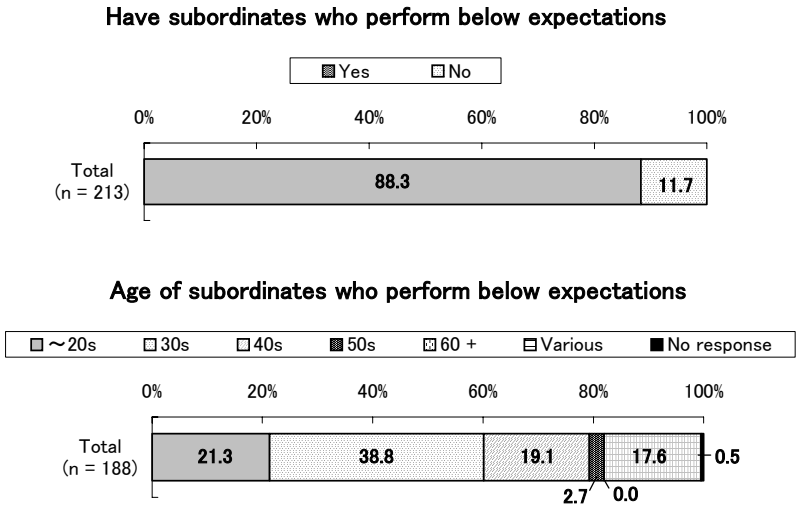
Reflecting the recent emergence of the information services industry, the age composition of IT engineers is relatively young: 47.5% are aged 29 or less (compared to 24.2% for all occupations), 39.2% are aged 30-39 (compared to 27.5% overall), 11.2% are aged 40-49 (compared to 21.9% overall), and 2.1% are aged 50-59 (compared to 26.4% overall). (MHLW, *Wage Structure Basic*

[3] Interpretations and conclusions presented in this paper are the sole responsibility of the author.
[4] We conducted four two-hour group interviews: two interviews each with 11 HR department employees, and with 13 managers, both from JISA member companies.
[5] HR managers at JISA member companies were requested to fill out a questionnaire posted on the Internet from November to December 2002; 213 valid responses were received.

Survey on Wage Structure 2004).[6] Since most IT engineers are under age 40, we would expect that a significant number of those above age 40 are underperformers. However, since 17.6% of underperformers are not identified by age, no firm conclusion can be made regarding performance and aging.

In the interviews, many managers also believe that age does not directly reduce performance. Positive statements on aging include: "age increases experience, knowledge and personal contacts, all of which enhance judgment"; "age sharpens business senses and enhances negotiating skills." However, on the negative side, comments include: "aging reduces the ability to keep abreast of rapid technological change or change in expected role" (such as switching from R&D to a managerial role); and "customers and superiors find it difficult to interact with IT engineers who are older than them."

Figure 1 Managers' Performance Evaluation of IT Engineers



Note: Age composition of underperforming IT engineers includes only reported underperformers.

3. Causes and Solutions for Underperformance

1. Causes of Underperformance

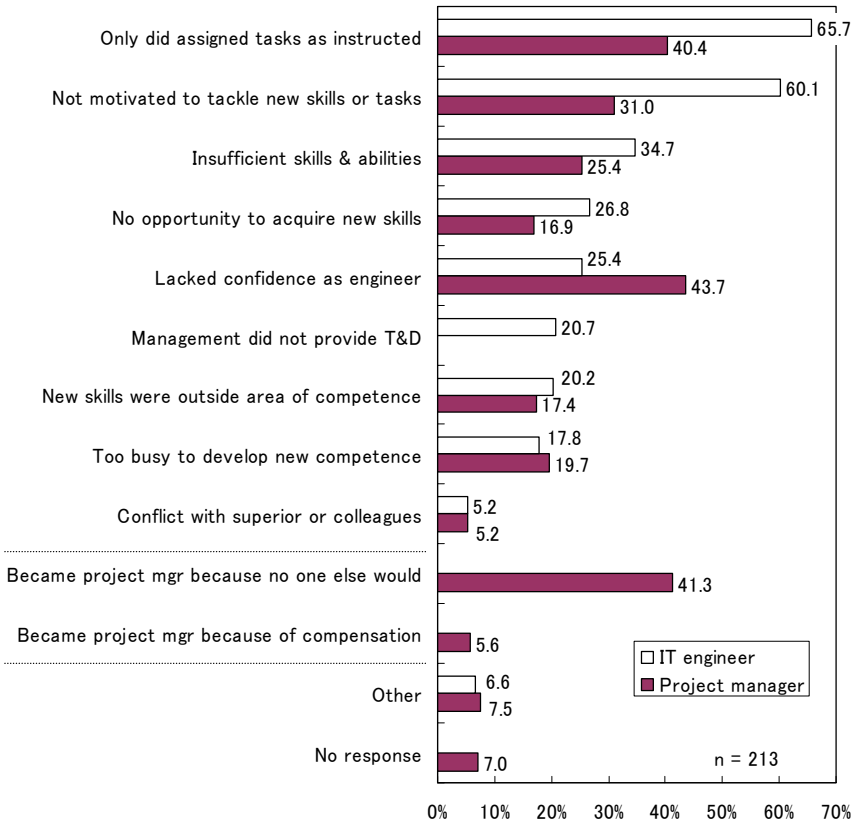
The questionnaire asked IT engineers and project managers separately about the causes of underperformance (Figure 2). IT engineers cite two primary causes for failing to meet expectations and gain competence: "only did assigned tasks, and only as instructed" (65.7%), followed by "not motivated to tackle new skills or tasks" (60.1%). Meanwhile, project managers cite three causes, each with over a 40% response rate: "lacked confidence in skills and specialty to become a competent IT engineer" (43.7%); "unwillingly became project manager because company lacked

[6] IT engineers includes system engineers and programmers, and excludes operators and key punchers.

candidates" (41.3%); and "only did assigned tasks, and only as instructed" (40.4%).

In the past, the information services industry valued IT engineers who could faithfully execute assignments as instructed. Today's IT engineers, however, must be problem solvers who actively seek out problems to solve. Apparently, the inability to adapt to changing industry needs, skills and job tasks is a major cause of their underperformance. For project managers, who currently enjoy a strong demand, underperformance appears to stem from the need to promote employees without adequate qualifications or experience.

Figure 2 Causes of Underperformance (IT Engineers and Project Managers)



Notes: Up to three responses allowed. Two responses pertain to project managers only: "became project manager because no one else would," and "became project manager because of compensation."

In the group interviews, managers cite flexibility toward change as an important condition for IT engineers to sustain performance. The awareness and abilities required of IT engineers include "communication skills and sales skills," "curiosity, inquisitiveness and spirit of challenge," and "acquiring an area of expertise."

2. Effectiveness of Performance Enhancement Measures

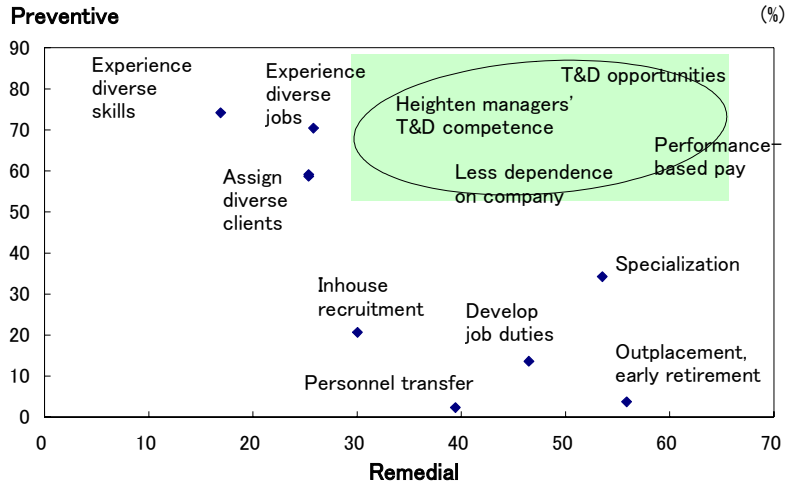
The questionnaire asked managers to evaluate the effectiveness of two types of performance enhancing measures, regardless of employee age—preventive measures begun at an early age, and remedial measures for current underperformance (Figure 3). Four measures are regarded as

effective both for preventive and remedial purposes: enhance training and development opportunities including self-development and training programs (85.0% as a preventive measure, 48.4% as a remedial measure); heighten ability of managers to train subordinates (70.95 preventive, 32.4% remedial); foster a sense of independence from the company (58.7% preventive, 38.0% remedial); and introduce performance-based compensation (65.3% preventive, 57.7% remedial).

Effective measures that are mainly preventive include “experience diverse skills” (74.2%), “experience diverse job tasks” (70.4%), “assign diverse clients” (58.7%). On the other hand, remedial measures considered to be effective include “revise or introduce job placement and early retirement programs” (55.9%), “revise or introduce a professional system (53.5%), “develop job duties” (46.5%), and “transfer personnel to a subsidiary or group company” (39.4%).

It is not unusual for IT engineers to be posted at a client’s site for an extended period. Moreover, as they become increasingly specialized, their skills risk becoming obsolete. This situation may explain the enthusiastic response for preventive measures that broaden experience in skills, job duties and clients.

Figure 3　Preventive and Remedial Measures for Underperformance



Notes: Multiple response; 213 respondents. Circled area indicates high response rates for both preventive and remedial measures.

In addition, preventive measures tend to receive a stronger and broader range of support, while remedial measures mainly lean toward outplacement and early retirement. This result suggests the importance of preventing obsolescence while employees are still young, and minimizing the need for remedial measures.

4. Career Management

We now consider the research project’s implications for a career management strategy that trains

and develops human resources for sustained performance.

1. Strategic Career Management Involves Both Company and Employees

Clearly, the first step in career management is for the company to present possible career paths to employees. But we doubt whether employees who passively follow the company's lead can develop the ability to sustain performance in the future. Employees must not only become aware of their expected role, but take the initiative in strategically mapping out their career.

For employees, this means checking whether the company provides appropriate career management. It also means that if for some reason the company's expectations start to deviate from the employee's desires, either side can raise the option of a job transfer option elsewhere.

2. Retaining Flexibility

To sustain performance over the long term, employees need to remain flexible toward change in both awareness and abilities. The survey results suggest two broad implications for maintaining flexibility.

First, personnel transfer and deployment decisions should consider long-term implications on career formation. While not all employees lose flexibility when posted indefinitely at the same job, most managers believe that variation in skills, job duties and clients can prevent underperformance. As aging starts to reach crisis proportions, companies must comprehend the implications of personnel decisions on career formation.

Second, companies must regularly monitor and advise employees regarding their awareness and abilities.

We can glean important clues from the interview results on conditions necessary to sustain performance. Managers cite "communication and sales skills," which are not only basic but highly transferable; "spirit of curiosity, inquisitiveness and challenge," which may fade over time as tedium and routine take their toll; and "acquiring an area of expertise," which boosts confidence to tackle new challenges.

Monitoring awareness and abilities is essential to maintain flexibility, especially for employees with long careers. Providing such opportunities on a regular basis helps to enhance employees' awareness and abilities, and thereby produce favorable results.

3. Compensation System and Employee Awareness

As the age structure of employees continues to rise, seniority-based compensation schemes are likely to be thoroughly revised. Companies need to check now whether all aspects of the

compensation system—wages, evaluation, and promotion—can withstand the effects of aging in the future.

At the same time, it is essential to alter the awareness of employees. Increasingly, managers will have to work with subordinates or colleagues who are older than them. But a problem arises when managers show an aversion to this situation, in which case they will need to be reeducated. In addition, older employees who cling to precedent and past ways must learn to willingly accept the opinions of younger managers and colleagues. Only when employees change their awareness can the new compensation system produce meaningful results.

For the author, participating in the JISA research project was valuable not only as an academic opportunity, but as an opportunity to think about her own career management. The author hopes that this paper also prompts as many HR managers and employees as possible to seriously address career management.