IS JAPANESE MANAGEMENT A SOURCE OF STRENGTH OR LIABILITY FOR SMALL BUSINESSES IN WAKAYAMA? A SURVEY-BASED STUDY[1]

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ABSTRACT

The principal aims of this study consist in shedding light on the potential contribution of JIT production methods and Japanese management towards improving the performance and competitiveness of manufacturing firms in Wakayama Prefecture. A field research was conducted on a sample of manufacturing and services companies in Wakayama.

Out of necessity not choice, the analysis of the survey results did put more emphasis on some features of Japanese management in the sample companies. Although distinctive features of the Japanese management system are usually understood to be of concern only for big corporations, the empirical evidence based on our own field research, suggests that those features are not completely absent from the field of small and mid-size enterprises.

The survey also offered some elements of evidence regarding important questions such as whether the Japanese management constitutes a source of strength or liability during the prolonged period of Japanese economic recession in the 1990s. Is a system of promotion based on seniority likely to discourage innovation and reduce the adaptability of companies to new technological challenges? Is it economically sound for instance to run in-house training programs that may be particularly prohibitive during such periods of economic slowdown instead of hiring ready-to-perform-the-job people that are already in possession of the necessary skills? Though the answer to the first question can be a clear yes, it is not easy to pronounce an unqualified yes or no for the second. In the short term, it may appear at first as a liability but from the long run perspective, and from the strategic point of view, it may be wise to keep such on-the-job-training programs.

Given the relatively small sample size, the statistical significance of the survey results cannot be rigorously assessed. It is not thus possible to draw strong conclusions. The evidence may not be conclusive, it can still be viewed as suggestive and have the merit of showing some interesting paths for future research.

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目次

I. INTRODUCTION

In the 1980s, the competitiveness of Japanese companies, especially of manufacturing enterprises, was such that they were seriously and justifiably enough, feared by competitors worldwide. Products made by Japanese companies were becoming virtual icons of worship for end-users who appreciated their high quality, attractive design, ease of use, and last but not the least, their strongly competitive prices. So it did not come as a surprise that such products did drive many competitors away from markets, even from their own domestic markets. This was particularly the case of USA markets where in certain sectors of the manufacturing industry, American companies making TVs, radios, VCRs, were completed wiped out and their products replaced by Japanese goods made in Japan or produced locally on USA soil. In Europe, the governments of some countries like France felt the strong need to protect local manufacturers by making almost inaccessible the entry of Japanese products into the French market. Acting with such protectionist instincts, the usual strategy to counter competition from Japanese companies was to rule them out of one's market.

It is interesting to observe that many American companies which lost part of their market share to Japanese competitors were ultimately absorbed or partially acquired by the same Japanese manufacturing firms, and once they had changed hands and switched to Japanese management style and production system, they recovered their strengths in terms of product quality, reliability, and so on[3].

On the other hand, it was remarked that American companies with a management style similar to that of Japanese companies did enjoy the same level of competitiveness as their Japanese counterparts[4]. It was then theorized that the key to understand the sources of success of Japanese companies was to find out the determinants of their management style and their production methods.

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[3] Among many other cases, it is possible to mention the firm "Technics" which was acquired by the Japanese company Panasonic.

[4] This is noted by W. G. Ouchi, "Theory Z", Avon, 1981, inter alia.

It was the success of Japanese companies over the 1970-80s that led many researchers to develop a special interest in studying the management style and production methods of Japanese companies in Japan. One should not lose sight of the fact that these significant developments in international competitiveness among manufacturing companies were taking place during the period of the Japanese economic bubble: the Japanese economy was growing at a pace unparallel, in the history of an advanced country. At the end of the 1980s, the bubble as a matter of fact busted; the pace and performance of Japanese companies decreased significantly. The Japanese management style, which was, among many others, labeled as the motor of the competitiveness of the Japanese enterprise, was now being looked at differently, as the source of its inability to adapt to the new environment. It was rather pointed to as an element that was preventing the prompt recovery of the Japanese company or retarding its timing. On the other hand, some companies like Toyota, with its JIT production system (which works rather well and most smoothly within the Japanese management system, its birth environment), continues to impress by their strong performance. The set of production methods that Toyota has devised and initiated decades ago continues to attract attention and to be used worldwide.

Academics duly recommend these methods to large audiences of professionals as well as to those of management school students. Strong and authoritative voices in the academic world consistently press for the universal adoption of these production methods, to which they refer as the lean production methods[5]. These have been and are still being prescribed by management consultants as the optimal approach to improve the production, the productivity and the product itself in a dramatic way. Reengineering, another management concept that shook the management theories and applications in the early 90s was a kind of reformulation of JIT, with the difference that till now the process was paid careful attention to as a value-creation place only in the manufacturing. Reengineering[6] refocused the attention on the fact that the service producing companies should also clearly define their processes, identify the core processes and organize their work flow around them. To the best knowledge of the author, this is the most important

[5] See Womack J. P. et al., "Lean Thinking", Simon & Schuster, 1996.
[6] See Hammer, M. "Beyond Reengineering", 1996.

contribution of the reengineering theory[7]. The theory of constraints with its emphasis on the identification of bottlenecks[8], seems to be an application of the theory of "network flow". Techniques proposed to deal with the bottlenecks and to improve the workflow can be found also in the JIT or are the same as those already proposed by JIT.

In Europe, especially in France and Germany, manufacturing companies that have won the prestigious industrial prize (IEA) have been identified as companies that have essentially converted themselves to the lean production methods[9]. And the Japanese production system continues to be worshiped in Europe where companies try to implement them in order to improve their performance. The adoption of those methods seems to be in full expansion in Europe[10]. It is very interesting to note that in France as well as in Germany, terms such as Kanban, Poka Yoke, TPM, SMED and 5S have already become an integral part of the technical jargon at the workplace[11].

It should be noted that the Japanese production methods continue to be used abroad by companies looking for better performance and sustainable development and growth. But the question remains as to what extent these methods assist or can potentially help Japanese companies in Japan itself recover in the aftermath of crisis engendered by the burst of the economic bubble. On the other hand, it is understood that Japanese management, being the environment within which the Japanese JIT was born and developed in the first place, has some decisive impact on the latter. Thus, it is important also to explore the issue of how Japanese small and middle manufacturing companies interact with these economic challenges, as far as Japanese management and production methods are concerned. Do such methods offer a source of strength or do they constitute rather a liability for companies with limited resources and ability of maneuvering such as SMEs? This is part of the motivation behind the conduct of the present study, which is meant to examine the extent to which companies in the Prefecture of Wakayama and the neighboring southern part of Osaka use Japanese

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[7] See Kupanhy, L. "A comparative Study of JIT and Reengineering," Wakayama Daigaku Nenpou, 2003.

[8] See Godratt, The Goal, North River, 1992.

[9] Kupanhy, L. Diffusion of Lean manufacturing thru IEA, IE National Conference, Orlando 2002.

[10] Ibidem.

[11] In the framework of IEA in 1999 and 2000, the author had the opportunity to visit and interview managers at many companies in France and Germany. It was clear that the JIT concept and related words have become part of the jargon used in several production sites worldwide.

production methods as a cure, and have created the ideal conditions or environment (i.e., Japanese management) to sustain the development of those production methods. In other words, we are interested to know whether Japanese management is effectively featured inside the manufacturing companies operating in Wakayama in their struggle for better performance. The assumption underling this examination is that if an ideal environment exists or has been created, then JIT can be introduced as a competitive tool and instrument for success. If JIT is already in place, then its development can be sustained for better yields and performance.

It is often noted that Japanese small and mid-size companies do not tend to clearly exhibit most of those features that characterize the Japanese management system. They are believed also to be reluctant to using Japanese production methods. The implicit assumption here is that those companies that can be identified as having adopted or tending to switch to JIT methods are doing so as a way to remedy, sustain or improve their performance.

Thus, to what extent do Japanese manufacturing companies, especially those in the Prefecture of Wakayama, rely on Japanese management style and production methods in order to cope with the difficult economic downturn? An attempt is made to provide an answer to the above-questions on the basis of the pieces of evidence obtained from the field research conducted in 2003.

II. RESEARCH METHODOLOGY

A survey was used to collect data useful in assessing the extent to which JIT is used and Japanese management features are present in the manufacturing companies located in the Prefecture of Wakayama. This prefecture in the south of Kansai area is not traditionally known for being home to large manufacturing companies but the population of small and mid-size companies, the target of this survey is rather significant. As for the approach followed in administering the survey, first the idea of a mail survey was discarded since it is known from experience that the response rate is bound to be always low and the period of reply is can be lengthy. Contacting the same companies by mail repeatedly, twice or three times can be a time-consuming and costly

exercise.[12] Thus, given the time and budget constraints, there was little choice but to proceed on the basis of a limited field research.

The field research is limited in many aspects. It was performed by seminar students who have no previous experience of conducting such a survey, but showed enough enthusiasm and interest in this exercise. Companies were contacted over the phone and appointments for the survey were taken. In few cases, the students made visits in the absence of prior appointment. They could have a questionnaire filled in on the spot, otherwise they were told to come back later to obtain the completed questionnaire. Unfortunately, there were several cases of clear lack of cooperation where the students were simply turned away or for no apparent reason, the questionnaire was not filled out at all. Besides, the quasi-absence of manufacturing companies in the city of Wakayama and the surrounding areas meant that traveling longer distances to visit other firms to conduct the survey was necessary. But again, the time and budget constraints could not allow for travels in the countryside. The result of these limitations was that in the fact the survey was mostly done in Wakayama City and covered a smaller number of companied than expected. Also, given these sampling constraints, it was not limited to manufacturing companies only as planned. The final outcome is that the survey turned out to be much more focused on Japanese management than on JIT.[13]

A period of about fifteen working days was devoted to collecting data in 15 companies, each company taking a day on average. Given the relatively small size of the sample, it is not possible to draw strong conclusions from this survey. The statistical significance of the survey results cannot be rigorously assessed. The evidence may not be conclusive, nevertheless it can still be suggestive and as such it should not be discarded completely. The main merit would consist in showing some research paths that have the potential develop further, in indicating some trends that might be verified

[12] The time and budgetary conditions under which a similar survey was conducted for the purposes of the author's Ph.D. research allowed for a better follow-up process in which it was possible to address the same companies with the survey materials on repeated basis, with the net result of increasing the sample size considerably.

[13] This greater focus on Japanese management is not only the result of the larger concentration of services firms in Wakayama City. It derives also indirectly from the growing interest in the services industry, which is evident even among students who participated in the survey and who happen to have just landed jobs in some services companies, the object of this survey. Some degree of measurement bias should thus be taken into consideration in the interpretation of the survey results as special permissions were occasionally granted to gather data on management style only.

by a study that would take more time, and/or for which more resources would be allocated. As such, the above limitations do not diminish the value of this study. Arguably, stronger conclusions in the assessment of firms' approaches in terms of management style and production methods are better drawn on the basis of a larger sample. But the present sample of 15 companies is still much larger than some reputed studies that were based on research about a single company[14].

III. SURVEY DATA AND DESCRITPION

As stated earlier, the survey covered 15 companies, of which the simple majority of eight represents manufacturing firms. Unfortunately, not all the companies did answer all the questions. Therefore, in the course of addressing the different issues considered in the survey, this presentation will take the utmost care of always stating how many companies dealt with each question or item of investigation. The survey is divided into two parts. The first part is devoted to Japanese management. The second one is devoted to some techniques of the JIT or lean production.

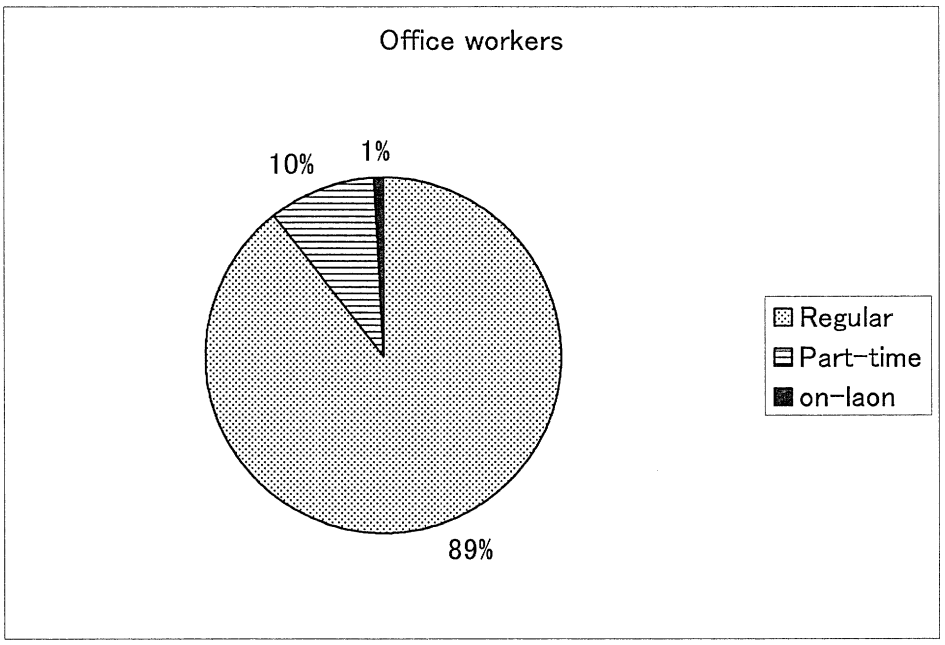

Figure 1. Classification of Office Workers

[14] The readers may be referred to W. Ouchi and his Theory Z for instance.

Figure-1 shows that almost all office workers are regular employees (89%) who have a stable employment status and enjoy a certain degree of job security. The 15 companies that make up our sample have a total working force of 3090 employees, of which 56% are regular employees, 39.4% are part-timers and 3.5% are hourly workers (or arubaito in Japanese jargon). Production operators represent 55% while office workers cover the remaining 45%.

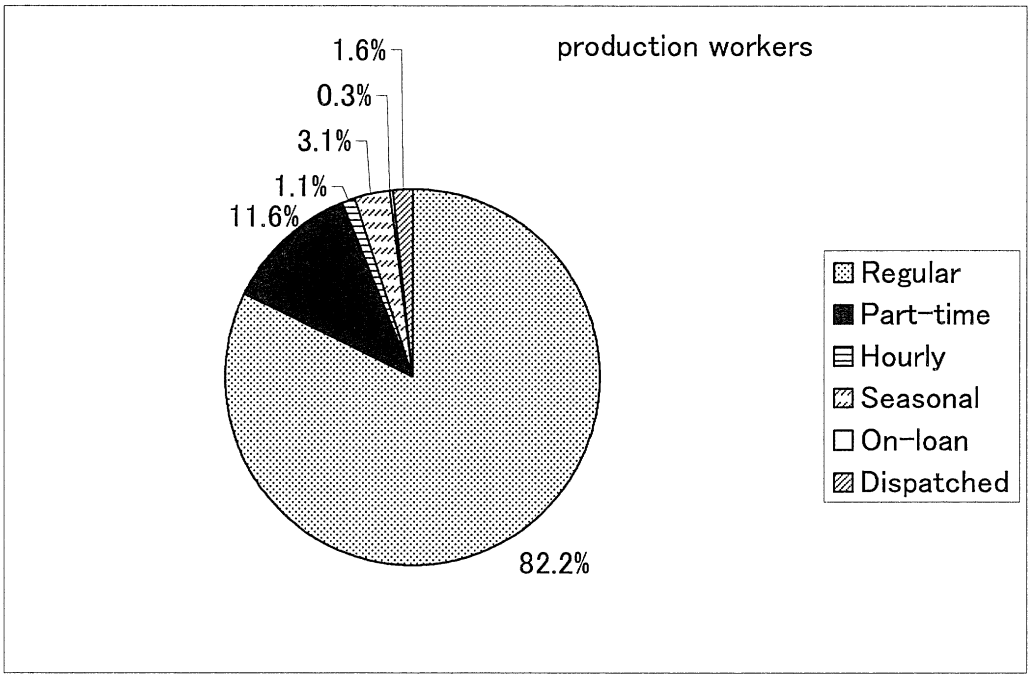

Figure 2. Classification of Production Workers

As for production workers, although the number of regular employees is large, there are many other categories of contracts that do no provide job stability (Figure-2). These categories include seasonal workers, those who are hired on loan as well as those dispatched on temporary basis from other companies. These miscellaneous types of workers represent 6% of the total workforce. The percentage of workers under less stable working conditions and job security is more likely to depend on the performance of the company and external factors including the worsening or improvements in overall economic conditions and sector output.

III.1. JAPANESE MANAGEMENT FEATURES

In conducting this survey, the following features of the so-called Japanese management features have been investigated: origin of managers, promotion factors and criteria for holding management positions, reasons for leaving the company, recruitment, job rotation (JR), on-the-job training (OJT), labor union and strike experience, labor-management relationships. The survey results concerning these areas of interest in Japanese management will be discussed hereafter in further detail.

III.1.1. ORIGIN of PEOPLE IN MANAGEMENT POSITIONS

Within the surveyed companies aggregated, there are 177 management posts of which 35% (or 62) are top management positions and 65% (115) are at the middle or lower levels of management.

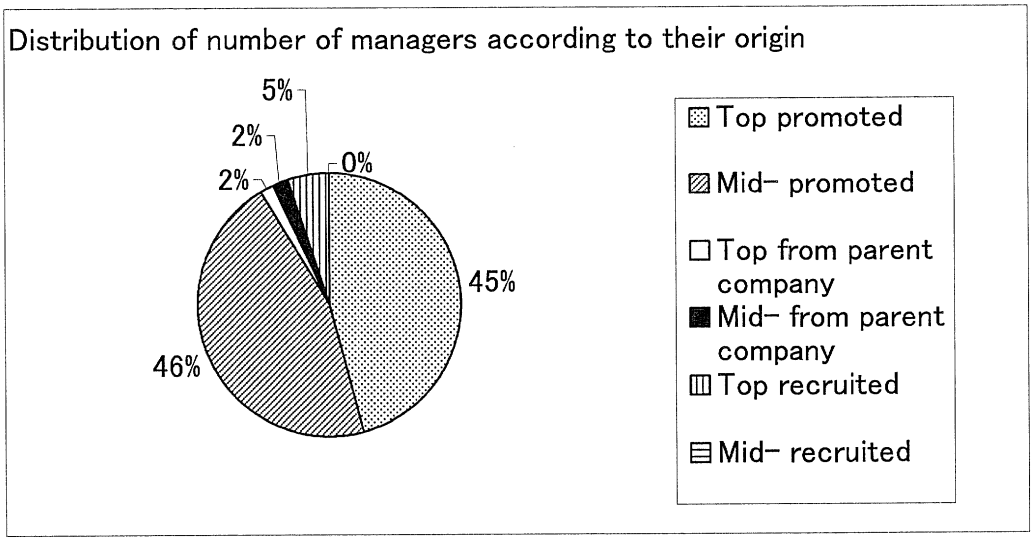

Figure 3. Distribution of Managers according to their Original Position

Useful data about the origin of 66% of those 177 management positions were provided. Figure-3 describes the distribution of managers according to their positions of origin. Even during the period of economic hardship that Japanese companies have been experiencing over the post-bubble decade of the 1990s, not a single manager has been recruited and 91% of the total number of managers has been promoted from within.

This may be considered as strong evidence that the system of Japanese management is still considered to be sound and continues to be adopted in an overwhelming proportion of small and mid-size Japanese companies.

III.1.2. Determinants of Promotion and Criteria for Management Positions

The questionnaire did not deal with the weight of each criteria but it instead sought to find the extent to which those criteria were spread across the organizations. Figure-4 shows that knowledge, technical or special knowledge and abilities are the most spread features, followed by the experience one has acquired at other companies (i.e., experience understood to infuse some fresh blood and ideas into the organization). The extent to which these features are spread seems to be in clear contrast with the theory of Japanese management according to which promotion from within is the main feature of the Japanese companies located in Japan. One third of the surveyed companies show their interest in bringing inside managers from outside. On the other hand, because of the lifetime employment system, people in management position have been promoted from within.

It can be assumed that the most spread feature tends to represent the criterion that is most sought after.

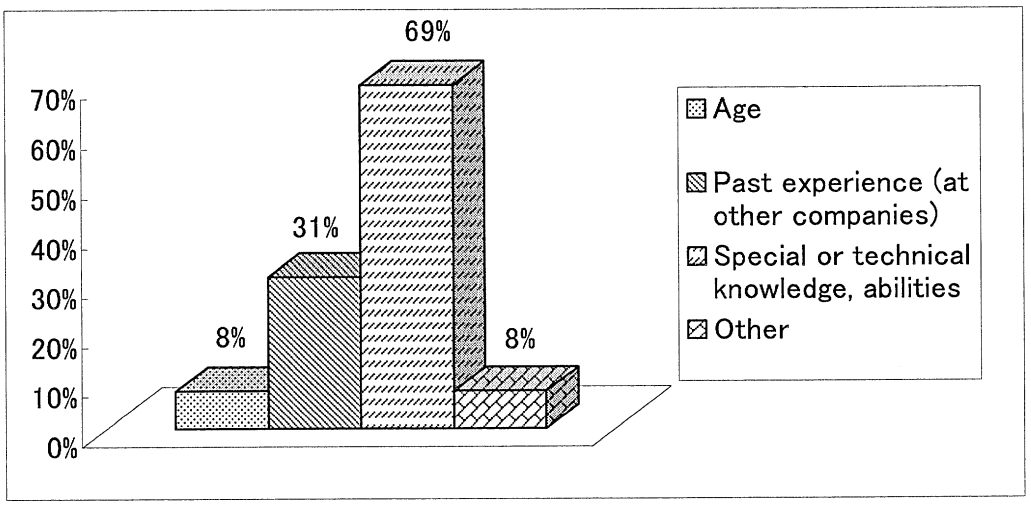

Figure 4. Criteria for Promotion to the Lowest Management Position

Other criteria account for the promotion or management selection process as well. These represent as much as 8% of the total. Companies checking the "other" in the questionnaire, when asked to be more specific, mentioned the following list of various elements of importance: length of service, professional qualification (example: accounting), leadership, personality and personal performance.

To continue climbing the management ladders, abilities & competence, length of service, and special/technical knowledge present respectively as much as 43%, 71% and 86% of the respondent companies (Figure-5). It is not surprising that all these elements contribute significantly in the decision-making process of manager's promotion. A single quality can be important and necessary but it cannot be sufficient. Understandably, factors such as the length of service and age do not count as much a significant element as competence and knowledge in taking decisions about further promotion of managers.

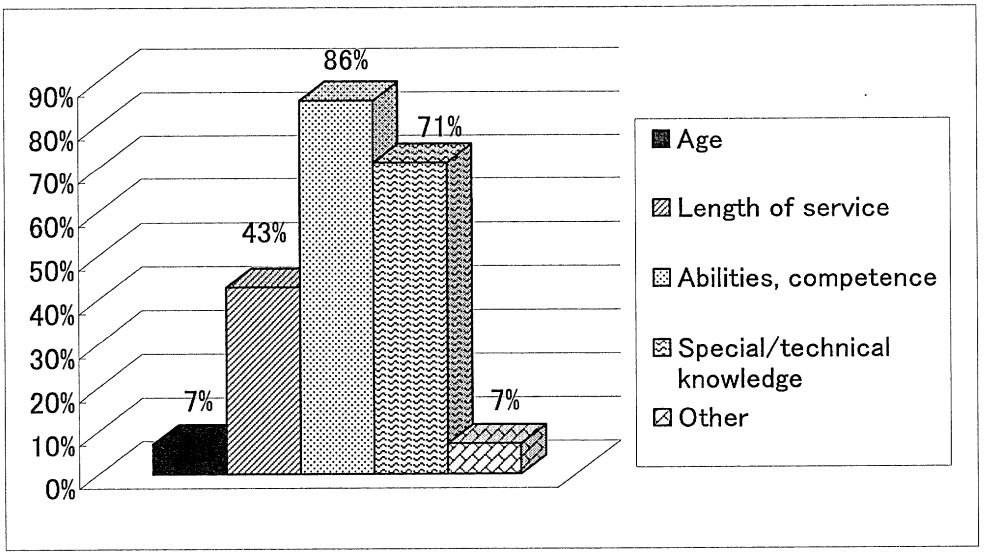

Figure 5. Criteria for Promotion within Management Ladders

III.1.3. Reasons for Leaving Japanese Companies

The management theory about Japanese companies implies that the most natural way to leave a Japanese company is through retirement. It is interesting to

explore the issue of what determines such decisions in the small and mid-size companies of Wakayama, especially during this long period of hard economic downturn.

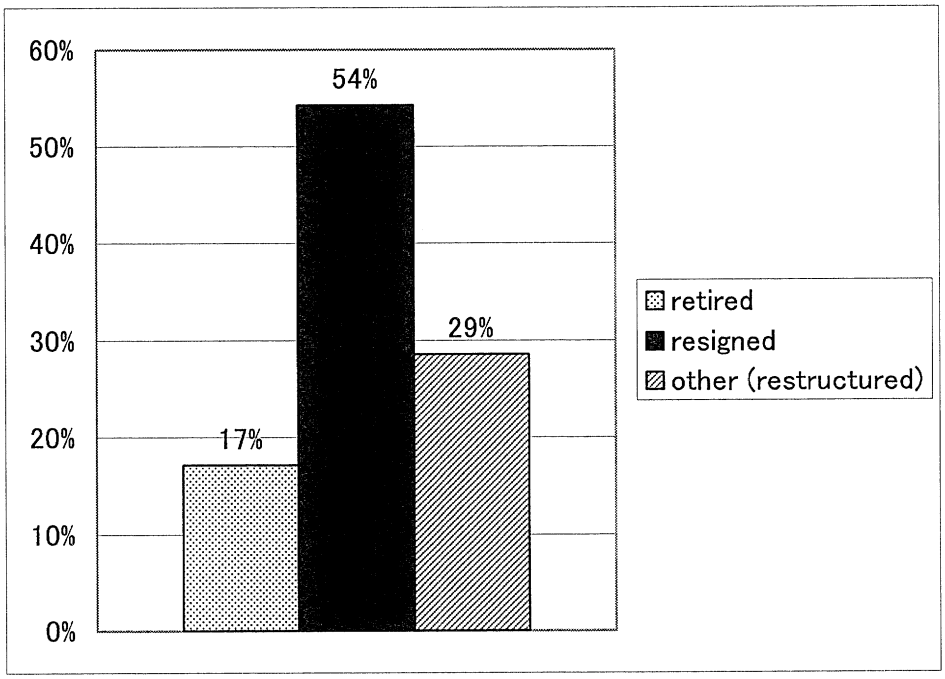

Figure 6. Reasons for Leaving the Firm

The results of the survey (Figure-6) indicate that in 54% of the respondent companies, those who left their company the previous year did so by voluntarily resigning, 29% of the respondents did force people to leave the company by way of restructuring (which simply means lay-offs). It is only in a small minority of the respondents (17%) that people did leave the company in the "natural" way of retirement, which now appears rather marginal. The survey conducted by the author ten years ago on a different sample of Japanese companies provides similar results, although the proportion of resignations was a bit higher (66%).[15]

[15] See Kupanhy, L. "Japanese Manufacturing Company: JIT Production Method and Management Strategies", Ph.D. Dissertation, 1993.

III.1.4. Recruitment

Another aspect of Japanese management practices is recruitment. Some mid-size companies do recruit in the primary workforce market, i.e. fresh graduates from schools as well as in the labor market. In fact, some company presidents reckon that thanks to the bad economic conditions in Japan, even small companies have the opportunities to recruit people from schools, which are traditionally the recruiting ground for larger companies. Small companies have always expressed their intention and willingness to recruit graduates from schools. It is rather the latter who shun them for better employment in larger corporations. The results of the present survey indicate that under the prevailing economic conditions, 60% of the respondents could recruit from schools and 80% in the labor market. This compares with the 55% from schools and 78% in the labor market. These figures were obtained ten years ago in Osaka on the basis of similar survey conducted by the author[16].

III.1.5. Job Rotation and On-the-Job-Training

As much as 43% of the respondents have job rotation (JR) programs whereas the remaining 57% do not practice it. With such a small proportion of companies having JR programs, one would or might expect the practice of on the job training (OJT) to be not well spread among the companies surveyed. It can be expected based on the implications of Japanese management theory that a close relationship exists between JR and OJT. Indeed, one of the purposes of OJT is to support JR by training people at new jobs.

[16] Ibidem

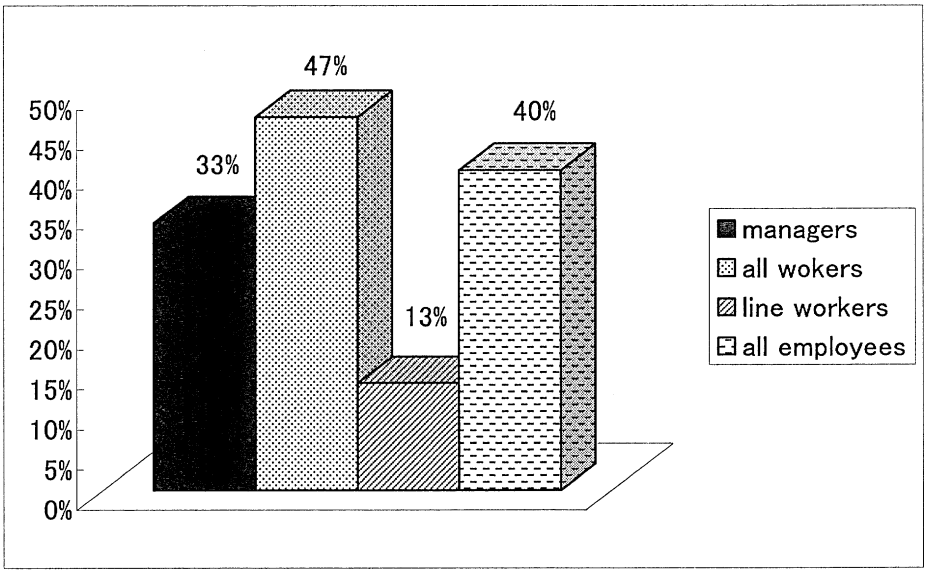

Figure 7. Who are OJT Programs intended for?

The survey results (Figure-7) show that OJT is a common practice in 73% of the respondent companies, and that only 27% do not have such programs. Of particular interest is the fact that the 5 companies which indicated that they did not have JR, admit however to practice OJT. Thus, the important question is whether OJT programs retain any significance for a company that does not simultaneously adopt JR programs. The answer can be yes, because there is still a need for some OJT training programs concerning the newly hired workers as well as those who have been promoted, even from within, to new jobs. Such OJT programs provide the opportunity to these workers to learn how to do and get used to their new jobs.

III.1.6. Labor Unions and Strikes

Almost all large Japanese corporations do have labor unions, which are usually referred to as in-company or company-specific labor unions. There are approximately 74,500 individual labor unions nationwide, strong with around 12.5 millions members. This represents approximately 30% of the total wage earners.[17] According to collected data, the presence of labor unions and the occurrence of strikes do not seem to be characteristic of Japanese small and mid-size companies. In fact, two companies out of

[17] Kansai Productivity Center, "How Japanese Companies Work", p.157.

the 15 surveyed (i.e., 13%) do have labor union organizations. Of the two companies with labor unions, one had some strike experience. The large majority of 13 out of 14 respondent companies or 93% have never had such an experience.

On the other hand, the two companies with labor union organizations indicate that labor unions members are eligible to management position promotion and some have been indeed promoted to management positions. This is consistent with our prior knowledge from Japanese management theory. Unlike Western labor unions, the line is not clearly drawn in Japan between the union organization and the business organization within which the former takes form and operates. As such, it can be expected that the nature of the relationship between these intertwined organizations can be conducive to greater harmony than conflict.

III.1.7. Labor-Management Relationship

Indeed, all the surveyed firms assert that cooperation and mutual understanding are features that characterize the labor-management relationship. This certainly implies that many issues are dealt with and resolved within this frame of cooperation and mutual understanding. This relationship is also characterized by 43% of the respondents as a negotiation-based relationship as well. Not a single company admits having the sort of conflicting and adverse relationship between management and labor that is characteristic of Western industrial relationships (see Figure-8)

It should be noted however that in the absence of organized labor unions, the surveyed companies, representative of other small and mid-size companies, the relationship with labor is very likely to be characterized as positive and rather "sweet" from the point of view of management. Because employees are not organized in labor unions and in the absence of any leadership, this impression of strong cooperation and mutual understanding left with managers is understandable and to some extent inevitable.

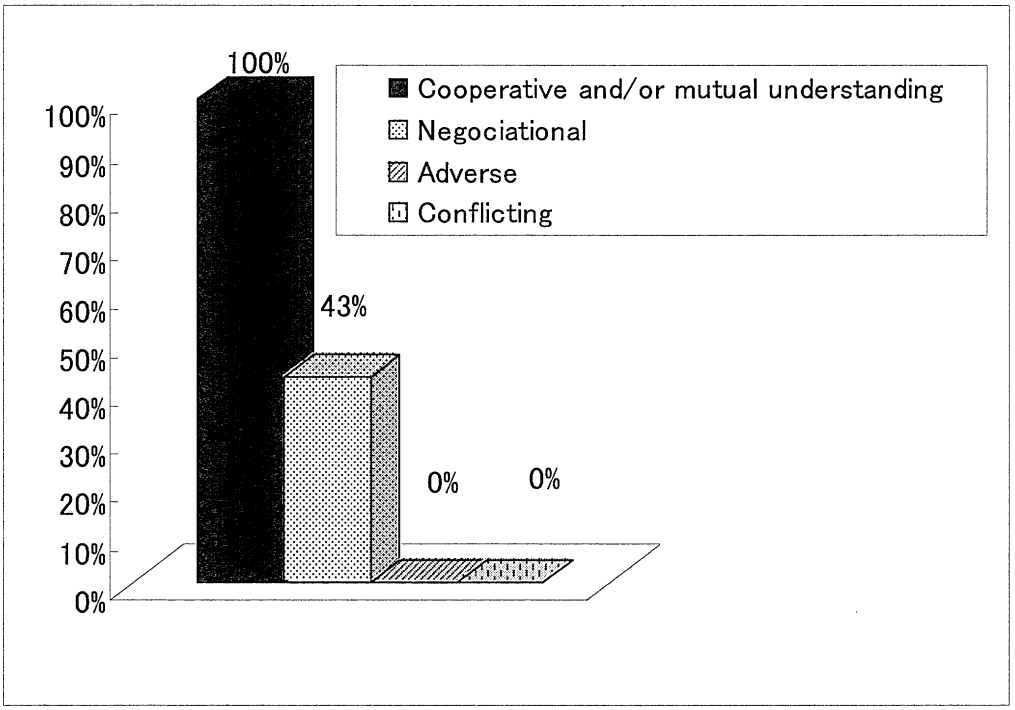

Figure 8. Labor-Management Relationship

Even if there were labor unions as is the case with the two respondents, the fact that union leaders can be and are promoted to management positions would necessary lead to cooperative relationship with management as the defining line between labor and management representatives is further blurred.

III. 2. Production Methods

Following the earlier discussion about the distinctive features of Japanese management, attention is drawn in this section to some aspects of the production methods used in the sample companies. Six of the eight manufacturing companies did deal with the question whether they use JIT production method or not. Unfortunately, only one respondent out of the six is reckoned to have switched to this production system. The remaining five companies stated that this system is not being adopted.

The only company that uses the JIT techniques introduced the system three years ago and is still in the process of implementing it. Despite this small figure, this is evidence for the existence of some degree of awareness that JIT can indeed be used by

small as well as by big corporations.

A further examination of answers to certain questions dealing with specifically important JIT elements such as QCC, multi-machine manning and mixed production reveals however that more than one company are, in a way or another, featuring JIT techniques.

Two out of eight manufacturing companies indicated their effective use of QCC. QCC is an important feature of the JIT system. It is the engine of kaizen, the continuous improvement without which JIT itself would not be successful. Zero inventories, zero setups, zero defects, zero waste of motions, etc are some of the idealistic goals of the JIT system. It is virtually impossible to achieve those goals but their main role consists in providing an incentive and reminder for the company using JIT that there is no end to the improvement process. And QCC is the framework within which ideas about improvement are thought of and developed.

Those improvement ideas are known as suggestions. In our sample, three manufacturing and two services enterprises have gathered suggestions for improvement. Of the five, one company collected 2 or 3 suggestions, and another company recorded 50 instances with an average of 5 suggestions per employee per year.

Improvement activities, in the framework of the JIT system, are sustained not only by QCC, but also by the suggestions system. The suggestions system is the procedure by which a company gathers individual suggestions for improvement. Although the survey did not specifically investigate the issue of whether the surveyed companies have indeed set up some sort of suggestions system, the fact that five companies (of which one is known to have also QCC), have collected suggestions for improvement, is a clear indication there are at least four companies with suggestions system.

Two companies have multi-functional workers (multi-machine manning workers or multi-process handling workers). In one of the two companies featuring multi-functioning workers, an operator can single-handedly operate between 6 and 7 processes at once. A production site with multi-process handling operators fulfills some of the important requirements for JIT introduction and kanban implementation. In fact,

for many machines or processes to be operated by a single worker (multi-functional worker), they must feature some degree of "autonomation" and must have a very short setup or change-over time.

According to T. Ohno[18], the originator of JIT, the concept of autonomation is one of the pillars of the JIT system. Autonomous machines or processes are automatic machines with the human touch or human intelligence. Autonomous machines are able to detect process problems, to give warning to attract the human attention to the problems or to shut down in order to prevent themselves from performing a defective work or operation. Usually, machines are transformed into autonomous machines with the help of some improvement activities involving both operators and engineers.

The survey seeks also to gain some knowledge about the extent to which the "mixed production" is adopted by the surveyed companies. The mixed production refers to the manufacturing of different kinds of items on the same production line. Three manufacturing companies use the mixed production. It should be noted that the mixed production is possible only when the set-up time is short.

The shortening of the changeover time at the production site, is made possible through the industrial engineering technique called SMED[19]. Any company with a desire to switch to the JIT production must first apply SMED techniques to reduce the set-up time. It is only after shortening the changeover time that a company can aspire to the introduction of the JIT production system with serious chances of success[20].

As an illustration, given that fact that most questions on JIT features remained unanswered by most of the manufacturing companies, there are signs that a large proportion of small- and mid-size companies have little knowledge or familiarity with JIT concepts.

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[18] See T. Ohno, "Toyota Production System", Productivity Press, 1988.
[19] See Sh. Shingo, "A Revolution in Manufacturing: The SMED System", Productivity Press, 1985.
[20] See T. Monden, "Toyota Production System", EMP, 1998.

IV. RESULTS INTERPRETATION AND CONCLUDING REMARKS

One of the principal aims of this study consists in shedding light on the potential contribution of production methods towards improving the performance and competitiveness of manufacturing firms in Wakayama. There is no claim of having provided convincing answers to the above issue, but the survey offered some elements of evidence regarding some equally important questions. Is Japanese management a source of strengths or liability during the prolonged period of Japanese economic recession? Are companies doing away with features of Japanese management or are they still justifiably sticking to them? To what extent can the use of Japanese management style lead to the adoption of the JIT system, which has the former as the most suitable environment?

The distinctive features that characterize the Japanese management system are usually understood to be of concern only for big corporations, which employ about 35% of the active working population[21]. The evidence based on our own field research, suggests those features are not completely absent from the field of small and mid-size enterprises. They are indeed apparent and prefigured already in those enterprises[22], and they do seem to be penetrating the small and mid-size manufacturing firms.

Out of necessity not choice, the analysis of the survey results did put more emphasis on some features of Japanese management in the sampled companies. The seniority-based system of promotion was the starting point. The structural examination of the origin of people promoted to or recruited for management positions for the first time leaves no doubt that the seniority system is the framework within which the promotion effectively takes place. Seniority-based promotion implies that managers are to be promoted from within the organization. Not a single person was recruited from outside and virtually all of the posts in the top, middle and lower management ranks are filled by people promoted from within. Although the length of service is among the features to which some attention is paid, greater emphasis seems to be put on special/technical knowledge, capabilities. Given these results, the question remains as to how to proceed if all those worthy of consideration for promotion purposes have similar

[21] See Chusokigyou Hakusho, 2003.
[22] L. Kupanhy, Ibidem.

capabilities? Would younger or older people be promoted?

The fact that companies seem to rely to some extent on the seniority system in deciding promotions within the management structure might have some negative effects on the capacity of the organization to restructure and reorganize itself to confront new challenges. In this new area of the information technology, the necessary knowledge and level of innovation and adaptability to the requirements of new technological applications tends to be found with younger rather than older people. This is evident from the numerous cases of the most successful cases of American IT-based or computer-based companies, being administered by young managers. In a system of seniority-based promotions, it is difficult to infuse new blood that has the potential of producing breakthroughs, new energy, new experience and/or new knowledge to the organization. The promotion from within as a Japanese management feature is thus likely to be much more of a liability than a source of strength that can contribute to improving the performance of companies during periods of economic recession.

Of course, when it is not possible to recruit in the labor market because of difficulties in finding specific skills that are needed for a particular job, one has no other choice but to develop the internal labor capabilities. This implies the inception and execution of in-house training programs. Therefore, the rationale behind the OJT programs that characterize Japanese companies in general is understandable. This management feature has rather a strong presence in the small and mid-size companies of Wakayama prefecture. The question that should be asked at this point is whether it is wise during such periods of economic slowdown to run in-house training programs that may be expensive instead of hiring ready-to-perform-the-job people that are already in possession of the necessary skills. Here again, does this feature constitute also a liability or a source of strength? It is not easy to pronounce an unqualified yes or no. In the short term, it may appear at first as a liability but from the long run perspective, and from the strategic point of view, it may be wise to keep such OJT programs.

During periods of economic hardship, the absence of labor unions and the collaborative nature of the relationship between labor and management can be viewed as very important and sometimes crucial. However, when one has also to take into consideration the developments that tend to accompany periods of economic recession,

such as the restructuring measure which cost several jobs and the high number of "resignations", which may hide several cases of forced resignations. From the point of view of workers in small companies, it could have been in their own interest to organize themselves into some kind of labor unions. A union that would not only cooperate, work with management but at the same would search ways to defend the best interest of both the company and the workers, as is the case in big corporations.

It is very unfortunate to find little evidence or no strong indication that small and mid-size companies in Wakayama are exploring ways to use JIT production methods in order to improve their performance and competitiveness. It is with the introduction of just-in-time systems that they can refocus their energy and resources on the core process, do away with all kinds of muda, and increase their productivity without laying-off a portion of their most important resources: the human capital. The management frame seems ripe (and it has always been so) for the introduction of JIT. But does the seniority-based system constitute an obstacle that prevents managers from realizing the merits and making full benefit of an excellent production system that is revered worldwide but ironically ignored to some extent in its birthplace, conspicuously by Japanese small and mid-size companies? As far as the regional industrial and economic development of Wakayama is concerned, this is an important issue that may constitute an interesting avenue for future research.

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