

## SKILL FORMATION IN DEVELOPMENT: CASE STUDIES OF PHILIPPINE MANUFACTURING (II)\*

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### VI. *U Corporation*

U Corporation (UC), a licenced distributor of a well-known brand (N) of Japanese automobiles, is owned and operated by a family of Chinese descent. The company runs two separate plants in Metro Manila. One of them is engaged in the production of automobile parts and components as well as the assembly of completely knocked down (CKD) packs (two Japanese models, i.e., a passenger vehicle and a pickup truck), while the other is devoted primarily to the repair and maintenance of N brand cars, either imported or locally assembled. The company has not taken part in the Government's Progressive Car Manufacturing Program (PCMP), and, partly for this reason, operates on a relatively small scale. As of 1980, the manufacturing plant employed a total of 81 workers, of whom 48 were production workers; the repair and maintenance shop was staffed with 22 workers, of whom eight were of temporary status.<sup>1</sup>

By virtue of the agreement with the Japanese licensor, UC has employed a resident Japanese engineer, who is stationed at the repair and maintenance plant to deal with technical problems and to train the production workers. His presence has been desirable, because, in the judgement of the Japanese assembler (licensor), a minimum of ten years is needed before the indigenous production workers will be capable of performing on their own. The resident Japanese engineer, a regular employee of the licensor, is alternated periodically. For the rendering of his engineering expertise, a daily fee of ¥10,000 is charged to UC.

As of 1980, the equipment in the assembly plant was entirely of Japanese make, including jigs and fixtures. The equipment was similar to the type used widely in Japan through the mid 1970s, until the introduction of fully automated production processes.

At the time of the survey, the repair shop could handle a maximum capacity of about 1,200 units per month, but operated at the rate of 500 to 600 units per month. The limited demand for repairs was unavoidable, because the number of N models in operation in the country was still small (approximately six to seven thousand).

For UC to grow, it will be necessary to increase the market share of locally assembled, N brand vehicles. In the opinion of the Japanese resident engineer (Mr. K), a prerequisite would be the establishment of a network of parts manufacturers with the direct or indirect

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<sup>1</sup> At the time of the survey, the assembly plant had few temporary workers.

help of Japanese parts manufacturers, in terms of capital participation, technical tie-ups, licensing agreements, etc. The various local assemblers can also complement each other by the production and cross procurement of components which are difficult for the local parts suppliers to manufacture.<sup>2</sup>

Aggressive entrepreneurial attitude is an important requirement for the growth of a company. In this respect, however, the resident Japanese engineer feels that the owner-manager is rather conservative in his management policy. For example, he seems less concerned with reinvesting his profits than he does with increasing his financial assets as quickly as possible. Moreover, the company's decision making is highly centralized, and is seldom delegated to subordinates.<sup>3</sup>

The majority (about 80 percent) of the production workers (all males) were born and educated in rural districts. Consequently, they show strong attachment to a rural life-style. Their average age is about 26. Their wages, as of late 1980, and computed on the basis of fixed daily rates, started at 25 pesos, the rate for a worker on probation, and jumped to about 36 pesos when the worker became a regular worker. The highest daily wage of a regular production worker was about 50 pesos. Inclusive of all the allowances, the workers' monthly stipend probably averaged about 800 pesos.

Wage rates do not vary from one shop to another. Some jobs require more physical effort, but are not necessarily compensated by higher wages. Any inequalities arising from the wage payment system are apparently corrected by counterbalancing the manpower allocation: the more demanding the job, the larger the size of the work force. Note, in this connection, that job rotation is not practiced in principle.

In addition to wages, the company provides its employees with a daily allowance (15 pesos per day), an annual bonus (one-month's salary equivalent), a medical allowance, a set of work clothes, the right to take sick leave (a maximum of 15 days per year), and a paid vacation (15 days annually). These last two privileges can be converted to cash payments, if the worker so requests.

According to Mr. K, the average worker is highly competent in the operation of machine tools. They seem less skillful, however, in performing work involving intangibles (e.g., heat treatment). Mr. K thinks that this reflects a lack of balance in their education. A Japanese worker is perhaps 30 percent more efficient than his Filipino counterpart in terms of productivity.

Worker discipline is one of the serious concerns of management. Firstly, absenteeism is fairly high (approximately 30 percent on the average). Secondly, work efficiency drops to an unbelievably low level during the half-an-hour periods at both ends of the work day. Similarly, the workers' pace slows shortly before and after the lunch break; some of them play basketball during their break, and are exhausted by the time they resume their work. Thirdly, the workers are inspected before they leave the factory so that no company property is taken out and sold in the market.<sup>4</sup>

Quality control has proven to be the most serious problem for UC. According to the

<sup>2</sup> In fact, such an arrangement existed in the 1970s between Delta Motor and GM Philippines.

<sup>3</sup> Perhaps, says Mr. K, the owner and the supervisors lack mutual trust, even though they have known each other for a long time.

<sup>4</sup> Also in Japan, a body search is occasionally conducted of newly hired workers to prevent the theft of small, company property such as machine parts.

resident Japanese engineer, Mr. K, the problem is rooted in the work attitude of the rank-and-file employee. First and foremost, it is not easy to discipline and motivate the workers. For example, the workers often manufacture products which appear identical with the sample but are in fact defective, and yet argue that they are entitled to full compensation for the hour spent on the work. A typical blue-collar worker might argue, "I could strive harder and increase my work efficiency if only the company would raise my wages." To this, Mr. K would say, "To be entitled to promotion or a raise, you must first demonstrate that you are not only capable but dependable. If you do so, I will see to it that your continued effort will be rewarded in a few years' time." Swayed by the argument, the worker may decide to work more diligently. However, his determination usually lasts no more than three days. In short, they are in need of pride of workmanship, so that they could value the quality of work for its own sake.

Secondly, even a good mechanic may lack flexibility. A capable model-A worker, for example, may be quite useless in fabricating model B. This is because they do not properly comprehend the basic principles. What matters here is not manual dexterity, but rather an understanding of the essence of manufacturing operations.

Thirdly, the Filipino workers are often afraid to assume responsibility and are reluctant to take up job assignments whose success or failure is directly dependent on their performance. In the same vein, the workers are easily discouraged. A supervisor's unfavorable comment regarding their job performance, for example, easily offends them and dampens their morale.

Company policy is in part to blame, because the workers are held responsible for unintentional errors and/or mistakes. This is in marked contrast to managerial procedures in Japan, where the economic costs arising from such errors are in principle borne by the company. The Philippine practice makes the workers afraid of experimenting with new ideas, and contributes to the atmosphere of indifference prevailing in the factory.

Fourthly, the workers' value orientation is rarely directed to the growth of the company. Thus, they keep special talents and/or knowledge to themselves, being reluctant to share them with their fellow workers. They try instead to make the best use of their newly acquired talents to advance their own material welfare, e.g., moving to a better paying job in another company. By the same token, those who have been promoted to supervisory positions have little to do with the blue-collar workers.<sup>5</sup> The workers' aspiration for social distinction constitutes a substantial barrier to the smoother transfer of industrial skills and related technology, both horizontally and vertically.

## VII. *J Works*

J Works (JW) is a relatively small metal-working factory, employing about 120 workers. Owned and operated by an indigenous businessman, the company began operation in 1967. Three-quarters of its products consist of construction materials (flat bars, etc.), and the remaining quarter consists mainly of jacks for Asian Utility Vehicles (AUVs), and of miscel-

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<sup>5</sup> The highest level a blue-collar worker can reach is assistant factory manager.

laneous, made-to-order products such as stainless steel kettles.<sup>6</sup>

Of the 120 workers, approximately 50 are regular employees. The turnover rate of the regular workers is not high; only three quit during the past year.<sup>7</sup> In fact, some workers have stayed with the company for as long as ten years. However, the older workers are few in number (not more than four). Ordinarily, the workers stay on when they cannot find better jobs elsewhere.

On the other hand, the company reviews the performance of casual workers and helpers every six months, and in principle, terminates their contracts except for those with excellent work records.

The factory operates on a one-shift basis. The average utilization rate of the production equipment, consisting mostly of second-hand, foreign-made machine tools, is about 50 percent. This seems of little concern, as the company does not practice rigorous cost accounting, except in the production of automobile jacks.

The jacks, one of the factory's most important products, are produced for two major automobile assemblers, Delta and Canlubang, and are used as part of the tool kits for the locally assembled AUV vehicles. While the assemblers' purchase orders are placed annually—a practice unchanged since the start of the PCMP in 1972,—their delivery schedules are adjusted monthly. On the average, one thousand units are required every month by each of the two assemblers.

The local jacks cost 77 pesos as of March 1981. The assemblers procure them in preference to much cheaper imported products (costing 25–30 pesos inclusive of tariffs) in order to partially fulfill the government's local content requirement.<sup>8</sup>

Two additional companies supply the same goods to the assemblers, but there is no competition among the three. The ex-factory price, while negotiable in principle, is the same for all three firms.

The management of JW is not much concerned with quality control, since the factory's products call for neither high precision nor standardization. As a consequence, the delivered jacks are subjected to item-by-item inspection by the assemblers. Approximately, five to ten percent of the products are rejected.

The relationship between the assemblers and the parts suppliers is highly business-like, and few signs of paternalism can be detected. No substantial assistance may be expected from the assemblers other than technical help such as providing samples of new products; little assistance is provided for the procurement of raw materials, and absolutely no financial assistance is provided. The contractual relationship with the assemblers has also proven to be of little help in securing loans from commercial banks.

Of course, loans are available from certain organizations such as the Technical Resource Center, Industrial Guarantee Loan Financing, and the Development Bank of the Philippines, but the interest costs are quite high.

<sup>6</sup> The company once considered the possibility of manufacturing horns for motor vehicles. Management was not certain, however, if the company could successfully compete with imported products, and, moreover, whether it could recover the R&D investment which would be a prerequisite for the venture. Consequently, the idea was quietly shelved.

<sup>7</sup> The executive vice-director sounded as if he welcomed a higher rate of turnover.

<sup>8</sup> The executive vice-director confided that even when priced at 77 pesos the jacks did not generate much profit for the company.

Payments by the assemblers are irregular and slow, although Canlubang's record is better than Delta's. Canlubang usually pays in 60 days, whereas Delta does not normally complete its cash transactions in less than six months after delivery.<sup>9</sup>

The executive manager of JW feels that the biggest problem facing the company is lagging labor productivity. For one, the variety of products produced by the company, many of which are made-to-order goods, makes it rather difficult to introduce mass production methods to boost production efficiency.

A more serious problem is that the Filipino workers do not work diligently enough, since they are not motivated. One reason for this, the manager feels, is monetary (low wages). However, improvement in the level of real wages will not resolve the problem completely, since the Filipino rank-and-file worker does not entertain the idea of "growing with the company."

### VIII. *D Philippines*

Located in Metro Manila, the company manufactures and sells air conditioners. It was established in 1976 as a joint venture between Mr. S, a prominent Filipino business man, and D Japan. Prior to this, the Philippine market had long been familiar with D's products since (around) 1967.

D Philippines (DP) actually consists of two corporate entities, D Engineering and D Manufacturing, which employed roughly 100 and 120 workers, respectively, at the time of this study (summer 1981). Of the two, D Engineering specializes in maintenance and servicing. The annual output of D Manufacturing totals about 9,000 tons, or about 1.2 million pesos. Most of D Manufacturing's machine tools have been acquired second-hand.

Aluminum and steel sheets are procured locally. The only semi-manufactured goods it buys from outside the company are thermostats and compressors. The company wishes to increase the number of subcontracted parts and components, but has found it difficult to locate parts producers who can meet the company's requirements: reliable delivery scheduling and proper quality control of the products.

While the style of management is basically American, some Japanese flavor has been added to it; for example, seniority plays some role in the company's personnel administration. In sharp contrast to the prevalent practice in the country, personal acquaintance does not count in the selection of new employees.

The newly recruited workers must complete a basic training course. Oftentimes they are not accustomed to distinguishing between company and private property, so they may walk off with company goods and sell them for cash. Consequently, a body search is conducted before the workers leave the factory at the end of a work day. The company makes a special effort to impress upon the workers the importance of observing the company rules. Failure to abide by the rules could lead to immediate dismissal. An important function of management, in fact, is to act as rule enforcing officers in the factory.

The manual skills of Filipino workers are fairly good, and certainly much better than those of Middle East workers. Moreover, their average level of educational attainment is

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<sup>9</sup> The standard terms of credit were three months at the time of the interview.

quite high, as reflected in their capacity to do mental calculations, which probably exceeds that of the average American. Consideration of these factors has led the company executives to claim that the production efficiency of D Manufacturing is much higher than that of its sister company in Europe.

In the opinion of the Japanese representative (executive director), however, the factory still has a long way to go in the area of quality control, especially in achieving the required level of product precision. But, he continues, the important key factors here are the workers and the organization of the work, not the equipment as such.

A difficulty lies in coordinating the numerous sections of the factory to ensure maximum production efficiency as well as the quality of the products. Whereas Filipino blue-collar workers are particularly adept at handicraft-type operations, where manual dexterity is important, they are not comfortable with the concepts of the modern, mass production system, where standardization is essential.

For one thing, the blue-collar workers show no great attachment to industrial machinery. For example, they do not take proper care of the machine tools, perhaps because they are company property and thus regarded as management's concern. Minor machine problems are neither reported nor attended to. All this is in striking contrast to the attitudes of ordinary Japanese workers.

In sum, Filipino workers exhibit a strong aptitude for industrial production, except in terms of worker discipline, a sense of responsibility, and loyalty to the company. The executive director is convinced, however, that the aforementioned "deficiencies" can be remedied in due course with proper training.

## IX. *P Corporation*

P Corporation (PC) manufactures a variety of electric home appliances, such as television sets, stereo systems, cassette recorders, radios, dry-cell batteries, washing machines, refrigerators, rice cookers, and electric fans. In addition, many of the components are supplied by the factory, except for highly functional goods. The company owns a separate corporation, NP, which specializes in the sales and distribution of PC products.

PC was founded in 1967 as a joint venture between a large Japanese concern (40 percent share), and a Philippine counterpart (60 percent share). Having settled in suburban Manila on a section of land about 12.4 acres (5 hectares) in size, the company grew quite rapidly and began exporting its products to the Middle East as early as 1971. By 1981, the export-to-output ratio reached approximately 20 percent in value.<sup>10</sup>

In 1979 PC's annual sales were 320 million pesos. Two years later (February 1981), the company's total work force numbered approximately 1,270, and its paid-up capital about 43 million pesos. Fifty three percent of the employees were male. The average age of the workers was 29 for males, and 31 for females. Approximately 75 percent of the blue-collar workers were engaged in production.

The factory was directed by 12 managers, who were assisted by 18 senior supervisors,

<sup>10</sup> The figure was higher (30 percent) in the case of TV chassis, which were exported to the United States.

It may be of interest to note that the unit cost of production of a condenser was ¥5.6 in the Philippines compared with ¥11.0 in Japan (as of 1981).

38 junior supervisors (of whom six were females), and 29 foremen (of whom three were females).

At the time of the survey, PC had 20 Japanese staff members, 15 of whom were stationed in the factory. The number of Japanese experts increased over the years as new production processes were successively introduced.

The annual total labor cost was approximately 15 million pesos (the figure for 1980). This figure implies that the average earnings of the company employees is about 1,200 pesos per month, which is quite generous by Philippine standard.<sup>11</sup>

The company's wages consist of basic wages, an emergency living allowance, a housing allowance, an attendance allowance (i.e., an incentive for good attendance), and other special allowances. In addition, the company pays an annual bonus at Christmas amounting to twice the regular monthly stipend (doubling the legal requirement).

As part of its efforts to achieve optimum worker performance, the company tries to link the annual bonus to the work performance, and to periodically retrain the workers. It also subsidizes the workers' lunch (rice and vegetables) to help sustain their physical welfare.

A company official claims that the production efficiency of the factory has improved by 300 percent during the five-year period of 1976-1980, of which 30 to 40 percent may be attributed to worker training. In 1981, average productivity (gross sales per head) was approximately 22,000 pesos per month.

The company has a union, and 65 percent of the employees are members. The union fee was six pesos per month at the time of the survey, two-thirds of which went to the union federation. The company management meets regularly with the union officers to exchange information and discuss such topics as a plan to establish a CO-OP store, rules pertaining to the suspension and discharge of the workers, etc. Perhaps due to frequent union-management consultations, PC has experienced no major labor disputes.

Reflecting the above-average level of compensation, as well as the peaceful industrial relations, annual labor turnover has been less than three percent of the work force.

Quite unique to PC is the practice of a "total management system," whereby certain elements of self-management are introduced. Monthly meetings are held in each section to discuss and resolve the problems which are encountered in day-to-day operations.

The company is also experimenting with a "reciprocal audit system," whereby each department's production performance is rated by a group of departmental managers. The underlying objectives of the program are to promote competitive spirit among the rank and file.

Note, in this connection, that the suggestion system is taken very seriously at PC. The company receives approximately 1,000 suggestions per month, of which about ten percent are adopted. In addition, QC circles have been organized, as product quality has been of special concern to the company since its products were placed on the international market.

Most blue-collar workers (about 70 percent) have been recruited from the local com-

<sup>11</sup> The cost for fringe benefits in 1980 was 6.5 million pesos.

According to the Japanese staff, real wages may nevertheless have declined over the past several years. Note, as a matter of reference, that the legal minimum wage used to be 104 pesos/month in 1970, was raised to 300 pesos/month (inclusive of allowances) in 1975, to 730 pesos/month in 1979, and again to 747 pesos/month in 1980. (At the time of the interview, a peso was roughly equivalent to ¥40.)

munities near the factory. This means that special effort was not required by the company to hire new workers by publicly announcing job openings (by way of advertisement, etc.), which, incidentally, is needed in the case of engineers and other professional staff.

The minimum qualification for a newly entering blue-collar worker is that he (or she) be a high school graduate (the tenth grade). Recruiting is conducted whenever there are vacancies. Job applicants are subjected to aptitude tests as well as physical examinations.<sup>12</sup>

Group orientation is provided to the new entrants, lasting three days and covering the rules and regulations of the company, among other things. On the last day of the orientation, an examination is administered to check the workers' level of comprehension.

After formally joining the company, the newly recruited workers are kept on probation for six months, and during this period each of them is carefully evaluated in the following three areas: job performance, work attitude, and knowledge of the job. The rating takes place three times before the probation period is over.

To aid the understanding of PC's personnel management policy, copies of the evaluation forms of probationary workers are included for reference at the conclusion of this paper. It is clear from these forms that management regards worker discipline as a matter of utmost importance. The workers are expected to pay proper attention to the following points: obedience to work rules, self-improvement, taking initiative, satisfactory attendance, cooperation, flexibility, cleanness/orderliness, promptness, public relations, and congenial personality.<sup>13</sup> To cite one example, prompt, orderly starting of each day's operation is a "must." The company does not accept any excuse for being late in the morning. As a disciplinary measure, the company closes the front shutter after the starting time in order to enforce the rule. This has resulted in considerable improvement in this area.

After the workers are assigned to individual sections, the major form of occupational instruction is on-the-job training. Concurrently, however, from time to time it offers courses on production technology, which run during working hours for one month. Course topics include: die fabrication and tooling, die casting, designing and manufacturing of plastic injection molds, measures to improve product quality and production processes, and industrial pollution control. The trainees for these off-the-job training courses are selected by the respective section supervisors, who also evaluate the workers training achievements.

Promising workers are occasionally sent to Japan for special training. During the seven year period extending from 1973 to 1980, a total of 67 employees were sent to Japan for this purpose: three studied in manufacturing technology, 31 studied in management techniques, and 33 studied in engineering. Of these, 12 left the company after their return to the Philippines (one from manufacturing, eight from management, and three from engineering).

<sup>12</sup> Filipino workers give the impression that they lack physical stamina, perhaps due to their unbalanced diet. (An observation made by Japanese engineers.)

<sup>13</sup> Thanks to these disciplinary measures, the rate of absenteeism is about four percent per month, which is similar to the rate in Japan. Substantial improvement has also been accomplished in the way that the workers take coffee breaks (*merienda*). That is, they do it in a much more orderly fashion now than they used to do. The breaks are limited to five minutes each at 10 a.m. and 3 p.m., and must be taken in designated areas only.

At the time of the survey, the writer was told that the most common complaints of supervisors concerning their subordinates were unauthorized absenteeism and too frequent use of sick leaves.



The number of overseas trainees is determined annually by the executive managers in terms of the likely benefits, such as improvement in production efficiency and product quality.

While the company takes worker training very seriously, many jobs in its factories actually consist of repetitive, manual operations of a rather simple nature. The nature of the work is all the more intensified, because the company's production system is designed in such a way that even an unskilled operator with no technical knowledge can take part in the process. (This implies that the processes are divided into many sub-steps, each of which requires repetitions of relatively simple operations.)

A similar condition prevails when a new process is introduced: the new technology, as well as the R&D efforts, etc., are essentially embodied in the production equipment. The company sees to it that the process runs smoothly with no extra effort or training on the part of the blue-collar workers.

The monotonous work does not seem to bother the Filipinos (at least not as much as it would Japanese workers), partly because they do not expect to stay in the same firm for a long period of time. (Even professional workers and supervisors leave the company.) Moreover, the Filipino workers' time horizon appears to be relatively short. They pay full attention to their present and immediate future, instead of taking a wider perspective. In any event, their sense of alienation is perhaps less intense than in Japan.

The other side of the same coin is that the Filipino workers' sense of identification with the company is almost negligible by Japanese standards. This is not to say, however, that the PC workers' allegiance to the company is not higher than at other factories in the country, if only because PC is not quick to lay off its workers.

By the same token, the Filipino engineers do not study hard enough. They tend to be rather complacent, resting on their past achievements and the authority which is bestowed upon them because of their positions, so that few grow to become professional experts.

The Japanese engineers have been invariably impressed that Filipinos not only work very diligently, but are quick in learning new things. Moreover, their manual dexterity is superb. For example, they are capable of manufacturing many complicated structures, e.g., steel conveyors, without using a blue print. On one occasion, a Japanese consultant commented during construction of a factory building that the ceiling should have been higher by about 50 cm. Hearing the comment, the workers immediately set to adjust it to the designated height.

On the other hand, few Filipino workers are exacting in their work. They are easily satisfied with their accomplishments, and do not pursue improvement in their work performances.

A basic principle of manufacturing production is to faithfully observe the previously agreed-upon procedure. The Filipino workers, their individual abilities notwithstanding, are not accustomed to observing this principle.<sup>14</sup> Moreover, they regard machinery as simply a means of production, and seldom take proper care of their equipment, unless forced to.

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<sup>14</sup> For example, an electric fan, after having been repaired by a Filipino electrician, rotated in the wrong direction. When confronted with the complaint, the repairman said very complacently that the fan could still serve its purpose if one turned it in the opposite direction.

## X. *MER Company*

MER Company is an iron foundry, currently producing arm beds for sewing machines as well as water pumps for use in a government project. The average monthly sales of the company totals about 700,000 pesos. MER is, in fact, one of the three major manufacturers of sewing machines in the country. The factory was originally established in 1959 and run by a discharged American soldier.

The number of production workers was approximately 180 as of August 1981, and their average age was about 28. Most of them (approximately 80 percent) have come from provinces such as Batangas and Bulacan.

In addition to the regular employees, the company hires about 25 short-term workers who are engaged in simple, manual labor in the foundry shop.

New openings for blue-collar jobs are normally posted at the factory gate as well as advertised on the factory's delivery trucks, whereas the company usually makes use of newspaper advertisements for recruitment of higher level professionals.

The blue-collar employees begin their factory careers as temporary workers. If a worker is judged to have sufficient aptitude, he (or she) is 60 percent assured of a position, and will undergo a period of apprenticeship lasting about 6,000 hours. After the training which is mostly on-the-job, the worker again goes through a period of probation for six months or so before being recognized as a regular worker.

In contrast to the prevailing practice of the Philippine factories which pirate rather than train their workers, MER clearly puts considerable time and effort in grooming its work force. As an example of this endeavor, the factory has taught its workers to use limit gauges, dial gauges, etc., in an attempt to achieve the desired level of precision in their products. A sewing machine, after all, is a simple precision instrument, and is made up of standardized, interchangeable parts. Naturally the factory regards its workers as a precious asset, and tries to avoid frequent worker turnover. Nonetheless, the workers' quitting rate, while relatively low by Philippine standards, has gone up to ten per year from five per year in the mid 1970s.<sup>15</sup> The increase may be explained largely by the outflow of workers to the Middle East.

Very little job rotation is practiced. A machinist, for example, normally moves up the promotion ladder as his skills improve. It is possible, however, for a worker to move from the foundry to the machine shop. In the past, there was even a case where a blue-collar employee moved up to a white-collar job.

Promotion of a production worker is subject to three conditions: aptitude, work performance, and ability (or potential thereof) to grow by absorbing new ideas. After two years experience, skilled workers with good records qualify for promotion to foreman. This happens occasionally, although not many blue-collar employees make a special effort to improve their production skills. However, once promoted to a supervisory post, they often devote themselves mostly to clerical work and keep their distance from the production site. Similarly, the engineers who are pirated from other companies are usually trained in the style of modern, American management, and are not necessarily familiar with the

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<sup>15</sup> The turnover rate is much higher among professional people, e.g., engineers and accountants.

day-to-day operations of medium- and small-scale factories. They, too, spend most of their time performing paper work, and are ready to leave the company as soon as other opportunities present themselves. In any event, it follows that the factory suffers from an almost perpetual shortage of well-trained, dedicated middle managerial personnel.

The wage rate for workers was four pesos per hour or about 800 pesos per month as of August 1981.<sup>16</sup> The level of wages in the foundry was slightly higher (by two to three percent points) than that in the machine shop. These wages, however, were not sufficient to sustain a family. Therefore, most workers were willing to work overtime, which had a premium of 25 to 30 percent.

One reason why MER has maintained its reputation lies in the presence of a dedicated general manager, Mr. G. He not only spends long hours in the factory, but also engages in sales promotion activities.

However, Mr. G holds a rather depressed outlook concerning the future of the Philippine iron foundry industry. Firstly, its products leave much to be desired in terms of quality. Secondly, they are not competitive price-wise, because the market is too small. Thirdly, Filipino entrepreneurs are concerned mostly with making money for its own sake.

Technology-wise, an iron foundry is basically the same in the Philippines as in Japan. Nevertheless, the quality of foundry products in the Philippines is subject to great variation. According to Mr. O, a retired Japanese expert who came to Manila to serve as an independent engineering consultant, the state of iron foundry technology in the Philippines in 1981 was roughly comparable to that in Japan in the early 1950s.

For one thing, continues Mr. O, the non-existence of blast furnaces was the most serious handicap for machine production in the Philippines through the 1970s; he is convinced that the machinery industry cannot grow in a society which lacks iron-casting technology.

Inadequate vocational education may be another cause for serious concern. For example, Mr. O has observed that the average iron casters lack proper knowledge concerning sand, in terms of quality, ingredients, moisture, etc. This knowledge is indispensable, and it can be transmitted relatively easily provided the foremen are willing to train their subordinates and the latter are willing to learn.

By and large, Mr. G thinks that the Filipino workers are diligent, if only because they must be to earn their living. However, not only are they slow in absorbing new things, but, being pressed by material needs, they are interested only in making more money, and show little interest in things which are seemingly unrelated to their immediate work.<sup>17</sup>

Even when a worker acquires new production techniques, he keeps the skills to himself, and seldom transmits them to his (her) co-workers in the shop. If the worker does not stay with a factory for long, it is not surprising that the acquired techniques are quickly lost to the factory.

In the same vein, Filipino machinists do not take proper care of the machine tools to which they are assigned. They regard equipment maintenance to be part of management's responsibilities, and report to their foremen only after a total break-down has taken place.

As of January 1981, the unit cost of a foundry product in the Philippines was much higher than in Japan or in Mainland China. For example, during the two decades prior

<sup>16</sup> The working hours at the factory are from 6 a.m. to 3 p.m.

<sup>17</sup> However, the workers do make suggestions. Good suggestions are counted as merits.

to 1981, the price of foundry products in Japan was roughly twice that of the gray iron used (i.e., the unit price of the final product was roughly equal to twice that of the gray iron). In the Philippines, by contrast, gray iron cost (as of 1981) 2.8 to 3.0 pesos/kg, whereas the forged products sold for 15 to 16 pesos/kg.

This high cost is partly due to the low utilization rate of expensive equipment, but mainly to low production efficiency, which is estimated by Mr. O to be about a half or a third that of Japan.

According to Mr. O, excessive overhead charges are the first thing that must be avoided in the metal-working industry, because the costs of production equipment weigh heavily in the industry's cost accounting. Moreover, the price of machinery is more expensive in developing nations. By comparison, the cost of materials, consisting mainly of gray iron, coke, silicon and sand in the case of iron casting, is less of a problem. Labor, land and buildings are, of course, relatively inexpensive in the Philippines. In addition, observes Mr. O, the cost of disseminating information has so far been negligible in the country, where any news concerning economic opportunities is spread quickly, perhaps much faster than among medium- and small-scale firms in Japan.

Industrial organization may be another factor leading to high cost, as well as under-utilization of the production facilities. In the production of sewing machines, for example, the assembler must manufacture all the necessary parts and components. This is simply due to the fact that the medium- and small-sized firms are under-developed, for if they were not, they would otherwise supply machine parts and/or services to the assembler.

In order to survive in the situation outlined above, a firm requires not only technology but also vigorous entrepreneurship. Mr. O sometimes wonders if Filipino managers are really prepared to engage themselves in such hectic managerial endeavors. In any event, they are willing to invest lump sums of money on a new project, but seem less enthusiastic about reinvesting their profits.

## XI. *Summary*

The firms surveyed in the present study may be classified by type of ownership and the nationality of the interviewees as follows:

Company	Ownership	Nationality of respondents
ACP	P	U.S.
DA	P	U.S. (2 persons)
F Motors	P	P
FMC	P and J	P(3)
UC	P	P and J
JW	P	P
DP	P and J	P and J
PC	P and J	P(2) and J(3)
MER	U.S.	P and J

*Note:* P stands for the Philippines, and J for Japan.

In total, 19 people were interviewed, of whom ten were Filipinos, six Japanese, and three Americans.

Listed below are points which have come up often in the interviews reported in the present paper.

(i) The Filipino workers are very diligent, given proper work incentives, and supervision.

(ii) However, for the average Filipino blue-collar employee, factory work is merely a means to earn a living. Consequently, workers assume a rather indifferent attitude toward their work and also to the company where they are employed.

Parallel to the outlook held by the workers, the entrepreneurs typically regard their firms as an extension of their private property; the concept of social responsibility apparently does not loom large in their thinking.

(iii) In general, the turnover rate is relatively high among Filipino workers. On the other hand, job rotation within a factory, while quite common in Japan, seems to be the exception rather than the rule.

(iv) Filipino workers' strength lies in their manual dexterity; they are particularly good at handicraft-type operations such as wood-working. In the area of engineering industries, where the country's experience is not necessarily lacking,<sup>18</sup> performance is best in operations such as sheet-metal work or welding. Relatively poor are intangible operations such as foundries, annealing, etc. In fact, one of the weak points of Philippine manufacturing may be that the country has not developed adequate foundries. Cases that fall between the two are machining and the production of electrical machinery.

(v) Engineering work sometimes is deficient partly because the operators do not have a clear idea of the significance of their jobs; they tend to repeat the operations mechanically without putting much intellectual effort into their work. In this regard, there is room for much more improvement in the areas of organization and management control.

(vi) Some Filipino entrepreneurs are reluctant to reinvest their profits. There may be institutional reasons for this. For example, management may fear that expansion may be taken as a sign of prosperity, thus inducing others (especially the government) to become increasingly demanding (in tax assessments, etc.).

Obviously, the writer has barely touched upon the important problems facing the contemporary Philippine manufacturing industry. It is not proper to attempt a generalization on the basis of the present survey. Nonetheless, the present study may have uncovered some common factors concerning the Philippine manufacturing factory, as observed in the years 1980 and 1981.

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<sup>18</sup> The writer was informed that the earliest machine shop in the Philippines was probably opened by Stracken and McMurra in 1899 in Iloilo City.

*APPENDIX*

P Corporation's Evaluation Forms  
for Workers on the Probationary Training Course

- (1) Probationary Evaluation Sheet (2nd Month)
- (2) Probationary Evaluation Sheet (4th Month)
- (3) Probationary Evaluation Sheet (5th Month)

(1) PROBATIONARY EVALUATION SHEET  
(2nd Month)

NAME: \_\_\_\_\_ Date: \_\_\_\_\_  
DEPARTMENT: \_\_\_\_\_ Date of Hire: \_\_\_\_\_  
Section : \_\_\_\_\_

1. HEALTH CONDITION

- ( ) a. Very energetic and active.
- ( ) b. Average amount of activity.
- ( ) c. Looks weak and sickly.

RATING: ☐

2. ALERTNESS

- ( ) a. Mentally alert and can grasp ideas quickly.
- ( ) b. Normally alert.
- ( ) c. Very slow.

RATING: ☐

3. MATURITY

- ( ) a. Analytical and resourceful.
- ( ) b. Acts judiciously on problem and instructions.
- ( ) c. Very poor on analysis and interest and narrow viewpoint.

RATING: ☐

4. INITIATIVE

- ( ) a. Has real desire to get ahead by doing right things without being told.
- ( ) b. Does excellent job even under pressure.
- ( ) c. Has done nothing on his own.

RATING: ☐

5. ATTITUDE

- ( ) a. Very cooperative and obedient.
- ( ) b. Sincere and considerate to others.
- ( ) c. Possesses undesirable character and traits.

RATING: ☐

6. FLEXIBILITY AND VERSATILITY

- (    ) a. Has capability to learn quickly and accurately other jobs, and is willing to accept other assignments.
- (    ) b. Courteously learns job at average speed.
- (    ) c. Fearful and hesitant to accept other assignments.

RATING: ☐7. DISCIPLINE

- (    ) a. Punctual in attendance and all schedule of activities and leaves work only when it is absolutely necessary.
- (    ) b. Requires certain degree of supervision and control.
- (    ) c. Absolutely undisciplined.

RATING: ☐8. HUMAN RELATIONS

- (    ) a. Exceptionally friendly and helpful; easily liked by everybody.
- (    ) b. Gives assistance only when asked to do so.
- (    ) c. Hard to get along with others.

RATING: ☐9. ATTENDANCE/TARDINESS RECORDSRATING: ☐

TOTAL SCORE: \_\_\_\_\_

RATER/EVALUATOR: \_\_\_\_\_

COMMENTS &amp; SUGGESTIONS: \_\_\_\_\_

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LEGEND: Above Average .....A: 85-95

Average .....B: 75-84

Poor .....C: 60-74

RECOMMENDED BY: \_\_\_\_\_

Supervisor

NOTED BY : \_\_\_\_\_

Department Manager

(2) PROBATIONARY EVALUATION SHEET  
(4th Month)

NAME: \_\_\_\_\_

Date: \_\_\_\_\_

DEPARTMENT: \_\_\_\_\_

Date of Hire: \_\_\_\_\_

Section: \_\_\_\_\_

1. SKILLS AND JOB KNOWLEDGE

- ( ) a. Has the competence to learn easily the nature of job from simple to complicated ones.
- ( ) b. Requires more on-the-job training and instruction.
- ( ) c. Good only for work which is usually simple, manual, routinary and requires little, if any, thinking and decision making.

RATING: ☐2. CREATIVENESS

- ( ) a. Exceptionally active imagination, always thinks up new ideas and methods.
- ( ) b. Exerts normal efforts to improve work.
- ( ) c. Makes no attempt to improve the work assigned to him.

RATING: ☐3. SAFETY CONSCIOUSNESS

- ( ) a. Extra conscious to protect himself and others from injury and property damage arising out of accidents.
- ( ) b. Usually careful, but not all times.
- ( ) c. Has the propensity of committing unsafe acts that will endanger himself and others.

RATING: ☐4. COST CONSCIOUSNESS

- ( ) a. Attaches personal cost value by protecting and safeguarding Company properties from loss, spoilage, damage and destruction.
- ( ) b. Normally follows standard operating procedures related to Cost Reduction Program.
- ( ) c. Takes no extra precaution or shows little willingness and desire to protect and safeguard Company properties from possible loss, spoilage, damage, and destruction.

RATING: ☐5. SUPERVISION NEEDED

- ( ) a. Reliable to perform his/her job without much supervision.
- ( ) b. Occasionally needs actual supervision to do the job well and on time.
- ( ) c. Needs close and frequent supervision.

RATING: ☐



6. PARTICIPATION ON GROUP ACTIVITIES

- ( ) a. Involves himself actively on group discussions, meetings, and sharing personal ideas, experience effort with the groups.
- ( ) b. Occasionally participates in group discussion and activities.
- ( ) c. Lacks desire and enthusiasm to participate in any group discussions and activities.

RATING: ☐7. SPEED AND ACCURACY

- ( ) a. Dependable in producing quality work, and on schedule.
- ( ) b. Negligible rejection and mistakes to his job assignment.
- ( ) c. Produces less output, careless and wasteful.

RATING: ☐8. DEPENDABILITY

- ( ) a. Can be depended upon to perform the requirements of the job.
- ( ) b. Does the job in accordance with the normal requirement.
- ( ) c. Needs close and more supervision.

RATING: ☐9. ATTENDANCE/TARDINESS RECORDSRATING: ☐

TOTAL SCORE: \_\_\_\_\_

RATER/EVALUATOR: \_\_\_\_\_

COMMENTS & SUGGESTIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

LEGEND: Above Average.....A: 85-95

Average .....B: 75-84

Poor .....C: 60-74

RECOMMENDED BY: \_\_\_\_\_

Supervisor

NOTED BY : \_\_\_\_\_

Department Manager

(3) PROBATIONARY  
(5th

	100	A	90	A	80
QUANTITY OF WORK	Takes special effort to do quality work of the highest level.		Dependable in producing quality work.		
QUANTITY OF ACCEPTABLE WORK	Exceeds the normal output. Uses time fully very fast.		Complete over the normal output. Conscious of efficiency.		
JOB KNOWLEDGE	Master of job. An expert on his own or related jobs.		Improving thru experience, training or initiative. Well informed and alert.		
VERSATILITY OR ADJUSTABILITY TO CHANGE	Capable at several skills. Quickly excels at new task.		Learns quickly and well. Needs little instructions on new work.		
SUPERVISION NEEDED	Self-starter. Resourceful. Can do minor supervision of others.		Needs little or no supervision.		
DISPOSITION AND INFLUENCE	Cheerful and considerate. Positive influence in any group.		Responsive and cooperative with associates and supervisors.		
CLEANLINESS AND ORDERLINESS	Very tidy and orderly in work and person. Keeps work area and surrounding clean.		Enthusiastic in keeping his work area clean and orderly.		
SAFETY	Very careful worker. Sets very good example.		Always tries to be careful on his own.		
ABSENTEEISM	No absence whatsoever during the period. Does not leave unless absolutely necessary.		No unauthorized absence during the period. Ask permission when leaving work area.		
TARDINESS	No tardiness during the period. Punctual at all scheduled activities.		Very much concerned whenever late.		

NAME OF EMPLOYEE : \_\_\_\_\_  
 DEPARTMENT/SECTION: \_\_\_\_\_

PERIOD : \_\_\_\_\_  
 RATER : \_\_\_\_\_  
 REVIEWER: \_\_\_\_\_

## VALUATION SHEET

(month)

B	70	C	60	D	50	SCORE
Conscious of quality and generally meets standard. Few rejections/mistakes.		Uncertain. Inclined to sacrifice quality for speed.		Frequent errors or defects. Careless or wasteful.		
Dependable for accomplishing the normal output only.		Irregular. Does not consistently turn out sufficient work.		Produces less than normal standard. Slow. Wastes time.		
Rarely needs instructions. Adequately trained for job needs.		Confused, but learns thru frequent instructions and checks.		Not learning even with frequent instructions.		
Adjusts readily to ordinary changes. Needs time when work changes radically.		Learns new ways slowly with instructions.		Resists change or cannot adjust. Good only on repetitive work.		
Only occasional attention needed to do job well and on time.		Needs regular supervision. Follows instructions.		Needs close and frequent supervision even on routine duties.		
Conscientious, willing and good natured. Tries to cooperate. Good team.		Swayed by his own feeling. Irritable if he dislikes assignment.		Antagonistic. Inclined to cause trouble. Onesided outlook.		
Conscious of Company policies on cleanliness and orderliness.		Dirty or disorderly at times.		No regard for cleanliness and orderliness.		
Usually careful, but not always.		Somewhat hazardous due to carelessness. Needs explanatory warning.		Unsafe on the job. Endangers himself and others.		
Occasionally absent but always with justifiable reason.		Occasionally absent with no justifiable reason.		Frequently absent with or without justifiable reason.		
Occasionally late but with justifiable reason. Tries to improve himself.		Occasionally late with no justifiable reasons.		Excessively late/tardy.		

TOTAL SCORE: \_\_\_\_\_  
 PERCENT : \_\_\_\_\_ %