

Quality of Working Life: A Case of Workers in an Electronic Factory

Phasina Tangchuang¹ and Phetcharee Rupavijetra²

Chiang Mai University

This research aimed at examining the quality of working life in an electronic factory owned by American businessmen. The samples were 251 workers who classified into 2 levels: 200 operators and 51 supervisors, engineers and middle management. Structured interviews were employed for data collection. Findings reveal that: (1) Minimum wage (149 baht/day) was applied for probation operators, while higher salaries were applied to the others. (2) Working hours for operators were normally 8 hours a day, 6 days a week. Due to low wage, operators thus seek for overtime which benefits them around two-thirds of the total income. Since the overtime had been fluctuated and cut since 2006 due to high competitions and steep drop orders, it effected to labors turn over up to 100 % in some departments, since they felt that it was the sign of insecure jobs. (3) The senses of insecurity were not only among daily workers but also engineers, and supervisors since no clear cut on career path provision, payment and promotion standard systems were informally set and ill-informed. (4) The management system was known as “over autonomous but rocky management”, thus some supervisors, engineers and managers requested for international standard management. (5) Despite some workers who worked with harmful machines and in below standard environment had been subsidized with extra money and benefits, but safety and good working conditions should not be ignored.

Keywords: quality of working life, payment, hours of work, security of employment, health at the workplace, work satisfaction

Problem and Rationale

In an era of high competition on domestic markets and in international trade, investors look for cheap labor. However, in countries with full employment and low wages, companies with poor human resource management face labor issues such as job hoping (Eaton, 2000; Rupavijetra, 2003; Chareanlert, 2003).

In such companies the whole management is negatively affected: general management, production management, and personnel management and in particular man power planning, recruitment, selection,

¹ Assoc. Prof. Dr., Center for Education and Labor Studies, Faculty of Education. E-mail: phasina@yahoo.com

² Assist. Prof. Dr., Center for Education and Labor Studies, Faculty of Education, E-mail: phetcharee@rocketmail.com

orientation, on the job training and personnel development. Labor turnover is especially problematical for skills: a newcomer has to learn new technical and behavior skills from an experienced worker and the company performance may be affected during this apprenticeship period.

A research conducted by Tangchuang and Rupavijetra (2007) found that it takes at least 1 to 4 months for a newcomer to learn the appropriate new skills, depending on his/her ambition. This finding was confirmed by the work done by the Center for Education and Labor Studies (2006) which interviewed 85 industrial factories and found that each new worker is put on a 3 to 4 months probation.

One effect of high labor turnover rate is that other employees may have to work harder and/or do overtime to compensate for the time lost with the trainee. This overtime may cause health problems to workers, and labor productivity may decreased. According to Figure 1 Thai labors work from 2,200-2,300 hours a year comparing to only 1,600 hours in industrial countries. Heads and supervisors have to control, or coach closely and more strictly. As a consequence, there is more stress at work and product quality suffers: the rate of defect is higher (Kaewcharean, 2001; Center for Education and Labor Studies, 2006).

Theoretically, factors which influence labor turnover are: inappropriate income, work dissatisfaction, job insecurity, unsafe workplace, unfair management or conflict with line leaders or supervisors.

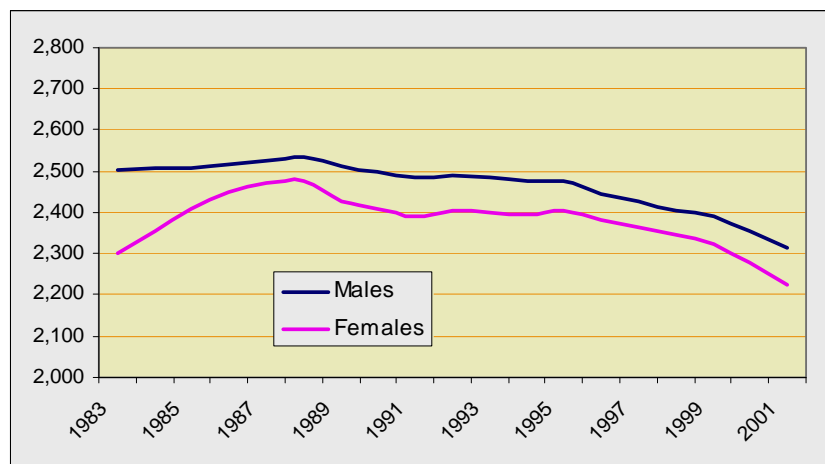


Figure 1. Number of working hours yearly of Thai labors.

Source: CELS labour database, 2006.

Note. Male shown in upper line and female in lower line

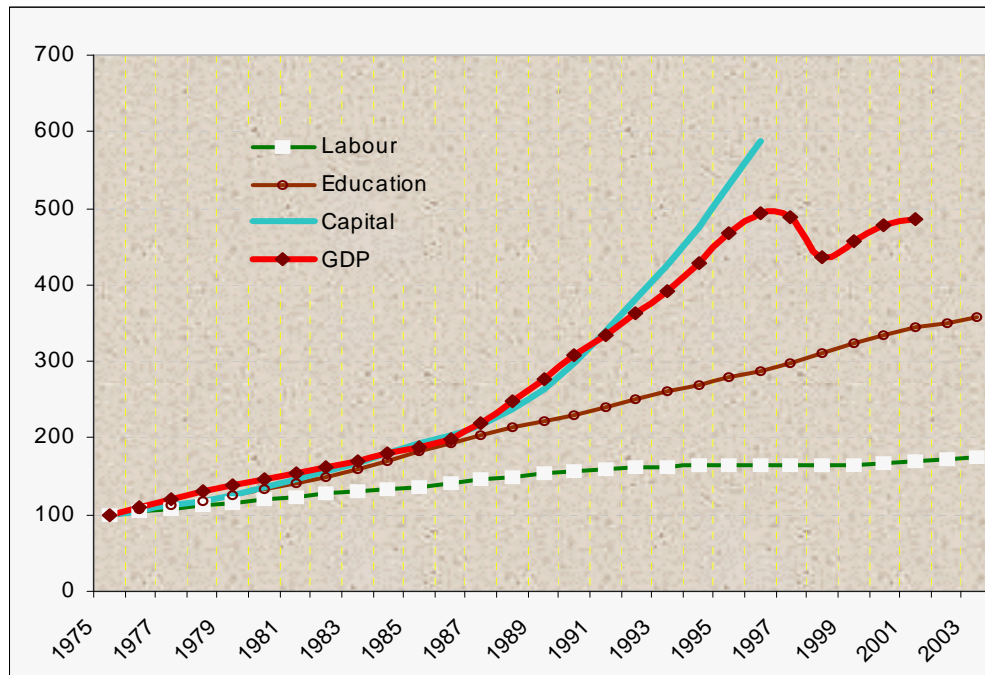


Figure 2. Evolutions of minimum wage, level of education, capital and GDP.

Source: CELS labor database, 2006

Regarding to our experiences for 2 decades and from field survey with many industrial sectors and more than 1,000 self-employed cases 3 years ago, it was found that most of companies faced with turnover rate of 10-15 %.

In addition, some companies had to deal with labor strikes in support of negotiation for higher wage. Such problems had serious consequences for the companies involved such as waste of time, hiring and training costs of new workers, and high rate of product defect in the range of 20 to 30 %.

Statistics shows that semi-skilled workers tend to quit when they know from friends or relatives of a better company to work for, when they are not satisfied with their working conditions, or when they consider that their wage is too low. The Center for Education and Labor Studies report (CELS, 2007) on workers' trajectories in industrial sectors revealed that workers aged 18 to 25 years had on average experienced 3 to 5 previous jobs. This high job mobility had a negative effect on skills because workers don't have time to accumulate experience. In addition, these workers planned at the end of their working life to be self-employed or to set up their own micro enterprises.

In electronic companies, we found that engineers and operators have usually a higher mobility. Our field research was realized at the company, where is a foreign owner, a supplier of many major companies. During the last few years, the company has been confronted with high labor turn-over and therefore the human resource department requested us to investigate the underlying reasons. The

company expected that the findings would help formulate the alternative strategies to solve the problem. In response, our research aimed at identifying the satisfaction and dissatisfaction of staff employees, line production and office workers, and from there proposing strategies to lower labor turnover.

Objectives of the Study

1. To examine the quality of working life in an electronic factory.
2. To identify factors relating to operators and staffs satisfaction and dissatisfaction.

Research Methodology

Interviews with managers, staff employees and operators. Total company employees: 2,000 persons. Sample size for the study: 200 operators and 51 executives. The research team also asked to visit working areas and to get access to personnel administrative documents.

Data Collection

- *Database:* Database from the factory and the visit of working area.
- *Field study:* Interview of 30 -60 minutes for each employee.

Data Analysis

- *For databases:* Databases from the company will be studied to understand the context which complement and fulfill the field study.
- *For field study:*
 - Qualitative data from the managerial level will be analyzed to complement the quantitative data.
 - Quantitative data from staff employees and workers interviews have been processed (put in percentage, cross tabulation).

Benefits from the Study

1. To get knowledge of factors relating to staff and operators satisfactions and dissatisfactions.
2. To propose strategies for problem solving.

Data Presentation

The research findings are detailed in tables.

The main findings are as follows:

Most of operators are females with an average age of 20 to 30 years. At this age, they are in full physical capacity. Nearly 80 % of the operators completed secondary school. This figure shows that these operators have a higher education level than the ones usually found in companies in Thailand where workers have only primary school education level. Three-fourth of operators had previous job experience in electronic factories but had resigned for different reasons:

- private reasons, such as problem with friends, peers, boyfriends and family; having debt;
- insufficient income;
- better job opportunity.

Table 1
Summary of Operators' Previous Job Experiences

	1 job experience (112 persons)		>2 job experiences (47 persons)	
	Frequency	Percentage	Frequency	Percentage
Started working at				
- 18-20 years old	47	41.96	9	19.14
- 21-25 years old	39	34.82	29	61.70
In electronic factories	61	54.46	26	55.31
Location of company in Lumphoon	61	54.46	29	61.70
Applied by oneself	57	50.90	27	57.44
Income at minimum wage	69	61.60	32	68.08
Daily – temporary workers	65	58.04	28	59.57
Resigned by personal reasons	50	44.64	23	48.93

Job Satisfaction and Dissatisfaction

Most of operators expressed that the company paid less than other factories. More than 80-100 % of operators expressed dissatisfaction on income, however, 36% of ITL-Manufacturing operators said they are satisfied with income and said that the company paid better than other factories.

Table 2
Comparison of Job Tenure and Income Satisfaction

Working period	Satisfaction with income	Dissatisfaction with income being paid	Better income than other factories comparing on hour of working	Less income than other factories comparing on equal working hour	Total
Less than 3 months	1	2	-	-	3
3-6 months	1	1	1	2	5
7-12 months	1	4	-	-	5
1-3 years	13	34	4	9	60
4-6 years	14	25	4	12	55
Longer than 6 years	19	28	11	14	72
Total	49	94	20	37	200
Percentage	24.50	47.00	10.00	18.50	100.00

Operators felt that the first 3 (good points) strengths/positive of the company are: safety at work, good working atmosphere (relation between supervisor and operators) and income.

Table 3
The Strengths of the Company

	Frequency	Percent age
Safety at work and less accidents	109	27.25
Atmosphere at work and relationship among colleagues	89	22.25
Better income than other factories	55	13.75
Good location	35	8.75
Having appropriate welfare and service	24	6.00
Having appropriate OT	20	5.00
Having better facilities at work	19	4.75
Having better work security	19	4.75
Work is interesting	16	4.00
Management style and good supervisor	14	3.50
Total	400	100.00

Table 4
The Weak Points of the Company

	Frequency	Percent age
Having OT lower than others	150	37.50
Less job security	85	21.25
Lower income than others	80	20.00
Lack of welfare	29	7.25
Management style of manager and supervisor were appropriate	16	4.00
Lack of supervisor to support and understand, stress at work	15	3.75
Stress atmosphere	12	3.00
Work conditions lacked of facilities	11	2.75
Lack of safety	2	0.50
Total	400	100.00

The operators felt that the 3 main weakness/negative of the company are: less over time, less work security and lower income than other companies.

The findings can be summarized as follows:

Operators worked for money and for life survival. These are the reasons for working in industry and not in agriculture. Operators are dissatisfied with income with what they consider insufficient working hours which reduce their income, insufficient over time for the same negative impact on income, and frequent factory shut downs which again reduce their income. In particular, operators with previous job experiences tended to feel dissatisfied with their income because they expected to be better paid than in their previous companies.

In addition, it is also found that most operators felt that there is a big communication gap between managerial level on one side and operators on the other side.

Table 5
Summary of Job Satisfaction

Job satisfaction	Frequency	Percentage
Working for money	182	45.50*
Working is important for living	167	41.75*

* select 2

Table 6
Summary of Job Dissatisfaction

Job dissatisfaction	Frequency	Percentage
Dissatisfaction with varied number of working hours	127	63.50*
Experienced workers were dissatisfied with low wage (112 persons)	64	57.14*
Disliked with big gap communication system	112	56.00*

* select 2

Summarizing operators' plan for the future, it is found that most of them had not decided yet for how long they would work for the company. But they expressed that if the factory change its policy regarding income, overtime, and appropriate environment, they would keep on working with the company. 92.06 % of operators planned for the future to be self-employed but they could not say when they would decide or be able to set their business.

Discussion and Suggestions for Internal Management

1. 49.0 % of executives accepted that there is a high turnover rate. The reasons for quitting were: lower income compared to other companies, and operators felt lacked of motivation from managing level. The suggestions for improving motivation are to increase wage, welfare, and also

creating good working culture or cooperating culture, set clear career path for employees in every position and announce it to everyone. These activities would make employees feel job security.

Table 7
Summary of Workers' Plan for the Future

	Frequency	Percent age
Operators like to work here	84	42.00
Not make any decision on how long they intend to work here	147	90.74
If factory set enough OT, operators might keep on working here	114	57.00*
If factory set appropriate environment, operators might keep on working here	104	52.00*
Expected to resign if getting a new job	23	54.76**
Want to set up their own business but don't know when	58	92.06***

* Priorities. ** 42 persons declared their intention to resign.

*** 63 operators declared their intention to set up their own business.

2. For new recruitment, the company should employ experienced workers. In effect, the study found that both married and single operators were strength and weakness. Operators who had children tend to be absent when they need to take care of their children but return to work as soon as possible because they need to keep on working to support their family. Some operators needed time for family reasons rather than over time. While the single operators tended to resign easily and needed overtime.

To recruit good new clerical workers (or office worker) and operators, executives suggested that supervisors of each sector should be involved as a selecting and training committee. In order to decrease budget for recruitment, and to get qualified persons, the company should give a token to staffs or operators who persuade relatives or friends to apply to work in the company. When the novice workers starts to work, the company should give full information about her regulations, goals, benefits, promotion policy, transparent criteria for wage increase, as well as expectations of working performance.

3. A recent year, executives implemented some internal mobility in order to job motivation – operators could see their future. Giving priority to temporary workers to become permanent employees would help keeping temporary workers working loyally. Some executives created a motivation atmosphere by supervising operators more relatively. Executives argued that the workers with skills but lacking of motivation would minimize their talents and competency. Executives agreed that there were some communication gaps between supervisors and operators.
4. Executives pointed out that it seems that the company paid higher regular wage than other companies, but when other benefits and overtime on a one year span are taken into account, operators received a lower income than in other comparable companies. Therefore, it is suggested that the company should increase the total income by revising some ways of calculating bonuses.

5. In order to keep the best employees, we advise that the company should consider an appropriate scheme to compensate for the income loss due to frequent shut down, and overtime reductions. The company also should show some intentions to make staff trust on the firm that they would not be layoff. In addition, the company should announce the career path in advance and transparently. Moreover, the company should follow the production plan strictly. It is because whenever the production plan was announced, but a week or two later it failed to continue. Operators would feel job unsecured.
6. An appropriate qualified supervisor to work with the company should compose of loyalty, hard working, efficient problem solving, and as the company is a modern technology factory, staffs then should develop their competencies to fit to those modern technology.
7. The fact that operators request more overtime and bonus means that more money is needed. The company should understand that job stability has a price (the reasons of this need). However, executives suggest that the company should record personnel database, as well as setting up “a counseling unit” for advising employees on money and time management, health care and family relations.
8. Frequent changes on managerial level implies too frequent changes of styles of management, as well as working conditions. The new manager should study the tasks thoroughly in order to creating a better understanding atmosphere before changing anything.
9. The company regulations should be implemented equally for every staff. The company should not offer privilege benefits to only staff in administration sector, but also to daily employees. For example when an office worker did some serious wrong, most of supervisors tended to neglect to punish. This phenomenon could lead others to be less loyal, to lack of team spirit and sense of belonging. The suggestion for this problem solving was for the company to focus on working transparency, accountably and created loyalty in every level.
10. For building up loyalty and solving problem on bonus issues, the company might use the criteria of being a shareholder (number of stocks).
11. The company should pay more attention on “research and development unit for new prototype” since it is the only channel to get more orders.
12. The company should develop indicators for work performance evaluation for promotion, job rotation, salary increase. The more transparency, the more morale creation and motivation.

Recommendations

This study proposed some recommendations in 3 categories:

- urgent proposal for organizational development;
- proposal for implementing the research results;
- proposal for further research.

For the First Category: Urgent Proposal for Organizational Development

Developing tasks and create new job.

1. Setting more efficient research unit for developing prototype and NPI in order to compete on new product, price and quality.
2. Developing capacity and skills for sales and marketing sector, in order to build up trust in brand name and make production of the factory credible worldwide.
3. Developing efficiency of the quality assurance process to respond promptly to the production process. This could decrease cost.

Establishing synergy.

1. To establish synergy by creating the company DNA, in order to make all operators and staff devote working for the progress of the factory, especially the executives should make themselves as a role model – leadership, team working and protect the rumor which could affect to the company's trust. In addition, the executives should pay a great deal of corporate culture and make everyone to be proud of being the company DNA.
2. To promote team working such as starting from proposing the benefits and morale to anyone who obtained the better /best work performance assessment.
3. To conduct participatory management by establishing the indicators clearly for considering appropriate income to any workers who had competency, better work performance and work with loyalty to the company.

Supporting and establishing quality of working life

The factory should improve the process of morale support, establishing loyalty to the factory by setting clear wage payment, career path for all positions, especially for staff who expressed better work performance.

1. The factory should make database on income and benchmark system on income and benefits both short term and long term.
2. The factory should improve planning process and management to more efficiency by paying effort to change working plan which will effect less to operator.
3. The factory should make basic database for each staff and set counseling unit for providing staff on sufficient living and quality of life.
4. The factory should improve quality and communication system in the factory to be efficiency and fact including to classify data to each position or public.

For the Second Category: Suggestion for Implement

1. In the dimension of hard adjustment of some staff to the industrial system – that occurred from limited or less perception and learning during learning period. The factory should develop the recruitment new staff by having process of inspecting value and attitude of applicants including the factory had to reveal the benefits in the next years 3-5-7-10 years respectively if staff working with the factory efficiently and develop themselves continuously and working with loyalty rather than pay attention to short benefit.
2. If it is possible for the factory to consider on adjusting wage payment base and appropriate benefits for staff who showed better work performance and loyalty to the factory formally form by announcing the conditions clearly and having transparency assessment system. This process should be conducted by committee – executives and representatives from staff.

For the Third Category: Suggestion on Further Research

1. It should be participatory action research on the company DNA developing which this policy should lead to create synergy, loyalty to the company.
2. After new activities, such as setting career path clearly or setting counseling unit or benchmarking system etc. had been developed and implemented for a certain time, the company then should conduct a research to evaluate those activities or projects.

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