

*Full Length Research Paper*

# The work value and job satisfaction of the testing department staffs in top five notebook original equipment manufacturer (OEMs) worldwide

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The aims of this research are to: (i) understand the differences of work value of notebook testing department staff based on different background variables, (ii) understand the differences of job satisfaction of notebook testing department staff based on different background variables, and (iii) look into the related situations between work value and job satisfaction of notebook testing department staff based on different background variables. This research is based on questionnaire surveys, expert conference and content analysis. With random sampling method, 600 samples were conducted from the testing department staff of the global top five notebook original equipment manufacturer (OEMs), 471 of which are valid. The effective response rate is 78.5%. This research adopted the scale referred to as "Work value survey" and "Minnesota job satisfaction questionnaire". The research population was the testing department staff of the global top five notebook OEMs. We adopted the Descriptive Statistics, Independent Sample T Test, One-way ANOVA, Scheffé Method, Pearson's Product-moment Correlation and so forth to analyze the data. The concrete conclusions that were made are: (i) there are remarkable differences in notebook testing department staffs' work value on social status and responsibility based on different individual variables; (ii) there are conspicuous differences in notebook testing department staffs' job satisfaction on relationship, promotion, working environment and leadership based on different individual variables; and (iii) there is positive correlation between work value and job satisfaction of notebook testing department staff.

**Key words:** Notebook OEMs, testing department work value, job satisfaction.

## INTRODUCTION

Making an excellent organizational performance, companies have to integrate employees' characteristics and abilities, and furthermore expect their work performance to comply with the operating mechanism as Figure 1 (Robbins, 1993; Seashore and Taber, 1975; Hobday, 1995). However, people nowadays hold mainly a paycheck-oriented work value at their job posts, differing from those in the past. Enterprises with good welfare

systems retain talent staffs, but these people may not carry out the true value of the enterprises. Therefore, how to make personnel identify positively with their own job tasks should be the main concern of the current enterprises (Rokeach, 1973; Bartholody and Peare, 2007). In the technology era, notebook industry has been making tremendous evolutions in terms of its functional characteristics, technical research and the appearance. With good quality products and employees' job satisfaction, enterprises will win customers' recognition (Hoppock, 1935; Kalleberg, 1977).

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Abbreviations: **OEMs**, original equipment manufacturer; **HP**, hewlett-packard.

## Background and motivation

Everyone's value differs because of the influence of

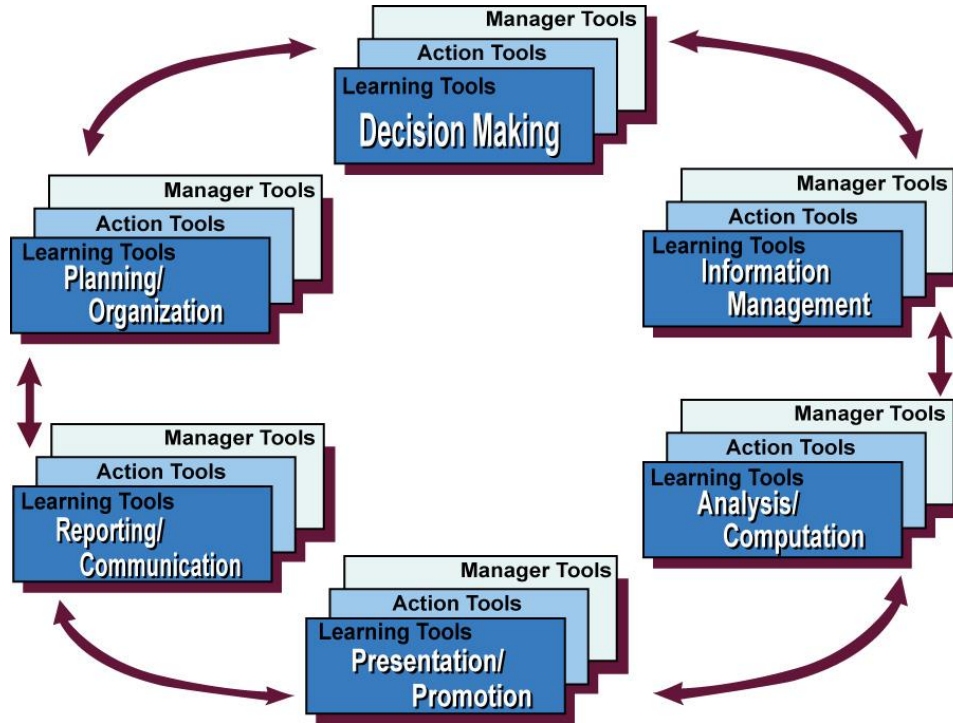


Figure 1. Products performance-enhancement system of notebook OEMs.

hereditary or postnatal environment. Employees' work values make enterprise's culture and are the key factor of product later development as well (Bernner and Blazini, 1988; Pryor, 1979; Zytowski, 1976). Dose (1997) thinks that employees' high satisfaction will lead to five results that (i) employees cooperate voluntarily to achieve the organization's mutual goal; (ii) with good discipline; (iii) holding higher interests in their own work; (iv) spontaneously completing their own tasks; (v) having stronger identification and loyalty with the company. Comparing to personal computers, notebooks belong to high-tech industry in terms of structure and function that their qualities are carefully examined and so do the qualifications of manpower and skills. At the present society, more and more people with high-educated are involved with notebook industry that offer a big help for product quality and its control. However, job-hopping and the self-centered concept are much more conspicuous (Brown, 2002; Wiener, 1982). High-tech is a capital-intensive and technology-intensive industry in Taiwan, especially notebook industry. Staffs in notebook industry seem to be in heaven-like environment with predominance in salaries, welfares and stock bonus. Notebook industry has taken up a significant part in Taiwan's technology industry, therefore, staffs involved within that their work value and job satisfaction tend to be investigated in related studies.

Therefore, it is extremely significant that employees of notebook OEM have to establish the correct concept of

products and services as Figure 2 (Hackman and Lawler, 1975). Previous studies found that there was a negative correlation between job satisfaction and quitting job intentions. Therefore, the results of this study show not only job satisfaction of notebook testing department staffs but also their job intentions with a specific aspect indication. Based on the aforementioned research motivation, this study aims to investigate the personnel who are in charge of notebook function testing and quality control to understand the correlation between their work value and job satisfaction. The results of the study provide related enterprises for their reference to promote employees' centripetal force and create a work environment full of harmony and vitality.

### Purpose

The purposes of this research are as below:

- a. Understand the differences of work value of notebook testing department staffs based on different background variables.
- b. Understand the differences of job satisfaction of notebook testing department staffs based on different background variables.
- c. Look into the related situations between work value and job satisfaction of notebook testing department staffs based on different background variables.



Figure 2. Products and services concept of notebook OEMs.

## RESEARCH DESIGN AND IMPLEMENTATION

### Questionnaire surveys

To achieve the research purposes, the study adopts questionnaire surveys and designs a questionnaire with reference to related literature of job satisfaction and work value. The results of the study are statistically analyzed with SPSS.

### Expert conference

To hold expert conference and invite professional scholars to provide suggestions regarding the framework, direction and questionnaire surveys in this study, and favor its implementation.

### Content analysis method

The data obtained from semi-structured questionnaire was analyzed and classified to further investigate the work value and job satisfaction of testing department staffs in global top five notebooks OEMs.

### Framework of research

In order to achieve the research purpose, the research framework is divided into independent variables and dependent variables. Independent variables are personal background variables (gender, age, marital status, education, work years, job types, and work experience). Dependent variables consist of work value and jobsatisfaction (Walker, Tausky and Oliver,1982).

In terms of work value scales, the internal part includes work honor and work involvement, the external part includes attitudes toward salary and social status. Having initiative and job responsibility belong to work internal and external parts. And based on Minnesota job satisfaction questionnaire, the survey variables are work specification, work stability, boss leadership, organizational management, promotion, work environment and interpersonal relationship (Lofquist and Dawis, 1978).

### Sample

To investigate the correlation between work value and job satisfaction of notebook testing department staffs and the research samples were staffs of notebook testing department in global top five notebook OEMs. Among the global notebook OEMs, over eighty-nine percent of notebooks are manufactured by Taiwan's manufacturer, which takes up 89% of the global market share. Companies such as Hewlett-Packard (HP), DELL, APPLE and Sony, etc. all give full permissions for the assemblages to Taiwan's OEMs, meaning that Taiwan's notebook OEMs is influential. According to investigations, the top five global notebook OEMs are Quanta Computer, Compal, Wistron, Inventec and ASUSTeK Computer in order (Industry value chain, 2007) shown Table 1. The study adopted purposive sampling method of testing department staffs of global top five notebook OEMs with 80 to 100 samples from each company. In total, 600 participants have been sampled and the participants were shown in Table 1.

### Tool

The research questionnaire adopted 5-point Likert-type scale with

**Table 1.** List of samples.

Company	Job	Sample	Total staffs
Quanta Computer	Technician	20	171
	Engineer	123	
	Section chief	4	
	Manager	2	
	Director	1	
Compal	Technician	25	167
	Engineer	118	
	Section Chief	4	
	Manager	2	
	Director	1	
Wistron	Technician	20	148
	Engineer	94	
	Section Chief	3	
	Manager	2	
	Director	1	
Inventec	Technician	15	85
	Engineer	61	
	Section Chief	2	
	Manager	1	
	Director	1	
ASUSTeK computer	Technician	15	161
	Engineer	79	
	Section Chief	3	
	Manager	2	
	Director	1	
Total		600	732

strongly disagree, disagree, neutral, agree, and strongly agree. Participants choose from the five scales for each question. The more scores they get from the scale, the stronger the participants identify with work value and job satisfaction. The process of designing the research questionnaire is described as follows.

#### Variable

(a) Participants' personal background variables (independent variable).

- i. Age: Participants' age ranges, below 25 years old, 26 to 30 years old, 31-40 years old; 41 to 50 years old, above 51 years old.
- ii. Gender: Male or female. - Marital status: Married, single, and other - Job titles: Technician, engineer, section chief, manager, director.
- iii. Education: Below senior/vocational high school, junior college, university, graduates (doctoral/master).
- iv. Work years: Below one year, one to five years, above six years.
- v. Work experience: "Yes" for work experience prior to the current company, "No" for no work experience prior to the current company.

(b) Work value (dependent variable) internal part at work.

- i. Work honor: Get the work done with a sense of honor within and get satisfaction and happiness from it at the same time,
- ii. Work involvement: Encounter work bottlenecks will take the initiative to consult colleagues; get involved with company functioning and make contributions to work-related decisions, External part at work,
- iii. Attitude toward earnings, Social status of work: Depend on personal own professional competence and win other people expects or not, Belonging to both internal part and external part at work,
- iv. Having initiative: The desire to seek for novel job knowledge and technical competence from work.
- v. Responsibility of work: Take work own responsibility and be happy to accept correction and guidance of others at the same time.

(c) Job satisfaction (dependent variable). The study referred to "Minnesota job satisfaction questionnaire" (Lofquist and Dawis, 1978; Wanous and Lawler, 1972) and divided job satisfaction into internal satisfaction, external satisfaction and general satisfaction.

- i. Internal satisfaction: The satisfaction the staffs perceives in terms

of their work value, responsibility, social status, and professional expertise. The measurement dimension includes work specification and work stability.

ii. External satisfaction: The satisfaction the staffs perceives in terms of salary, promotion, interaction factors between bosses, team members and colleagues (Wollack, Goodate, Witjing and Smith, 1971). The measurement dimension includes boss leadership, salary and promotion.

iii. General satisfaction: The overall satisfaction of internal and external satisfaction. The measurement dimension includes work environment and interpersonal relationship. Suggestion part was designed in a semi-open questionnaire format with four questions.

The questions were mainly to investigate the related opinions of participants' viewpoints toward work value and job satisfaction. Research participants provided their personal experience and investigation for further data collection and analysis.

### Context validity

After the first draft of questionnaire was completed, it was investigated by professional scholars and was revised based on their suggestions. Six professional scholars were invited to complete the "Work Value and Job Satisfaction of the Testing Department Staffs in Global Top 5 Notebook OEMs Questionnaire." Suggestions and recommendations were made with questions' suitability and word choices in the first draft of questionnaire to construct the content validity of the research tool and provided references for the questionnaire.

### Analysis of pretest

When the first draft of the questionnaire was completed, it was distributed for pretest. Staffs in testing department of Compal were chosen for pretest and 100 effective samples were collected after random sampling. After the pretest samples were collected, they were analyzed with statistic software for factor analysis and test of reliability with Cronbach's  $\alpha$ .

### Factor analysis

The study adopted Principal Component Analysis to get factors. Furthermore, the maximum variance method was adopted to conduct an orthogonal rotation and items whose factor loading value were below 0.3 were removed as well as those factors whose component matrix were less than 3. Factor analysis was adopted to analyze the scale to test its validity. Working value and working satisfaction were measured, respectively.

### Reliability analysis

The study adopted Cronbach's  $\alpha$  to check the alpha coefficient of the scale and the alpha coefficient was .721~.823. It shows that the scale has high reliability.

### Questionnaire

The first draft of the questionnaire was examined by expert scholars and was revised. The data was collected after the distribution. After deleting inappropriate questions through factor analysis and reliability analysis, the questionnaire was constructed, comprising of four parts-participants' personal information, working value, working satisfaction and suggestions.

## RESULTS AND DISCUSSION

The study analyzes work value and job satisfaction and the results are described as follows.

### Analysis of work value and job satisfaction of sampled employees

(a) Overall analysis of work value of sampled staffs at testing departments. The overall average of work value is  $M=3.47$ , which means that all of sampled employees demonstrate a positive work value; "work involvement" is the highest, and "social status" and "having initiative" are the lowest.

(b) Respective analysis of work value of sampled staffs at testing departments

(i) Analysis of "work honor": "I feel a sense of honor with my work." gets the maximum average score as the highest work value cognition. The data analysis indicates that if employees want to raise their work honor, they first have to feel the same way as the foregoing.

(ii) Analysis of "work involvement": "I consult my colleagues actively when encountered work difficulties." gets the maximum average score as the highest work value cognition. The data analysis indicates that if employees want to raise their work involvement, they first have to do the same thing as the foregoing.

(iii) Analysis of "salary attitude": "I would move from one firm to another if there is a better treatment and job opportunities." gets the maximum average score as the highest work value cognition. The data analysis indicates that if employees want to raise their salary, they first have to find and get another good work as the foregoing.

(iv) Analysis of "social status": "My professional expertise is authorized to guide others" gets the maximum average score as the highest work value cognition. The data analysis indicates that if employees want to raise their social status, they first have to own professional expertise to do the same thing as the foregoing and then to be respected and honored by others.

(v) Analysis of "having initiative": "I can get novel job knowledge and technical competence from work." gets the maximum average score as the highest work value cognition. The data analysis indicates that if employees want to raise their having initiative, they usually have to get job knowledge and technical competence from their work.

(vi) Analysis of "responsibility": "I am happy to accept correction and guidance of others" gets the maximum average score as the highest work value cognition. The data analysis indicates that if employees want to raise their work responsibility, they first have to do the same thing as the foregoing.

(c) Overall analysis of job satisfaction of sampled employees at testing departments: The overall average of job satisfaction is  $M=3.28$ , which means that all of

sampled staffs demonstrate a more satisfactory job satisfaction; “interpersonal relationship” is the highest and “promotion” is the lowest.

(d) Respective analysis of job satisfaction of sampled staffs at testing departments:

(i) Analysis of “work specification”: “My work is brimming challenge.” gets the maximum average score as the highest job satisfaction cognition. The data analysis indicates that if employees want to raise their satisfaction of work specification, their work has to be challenging and they could complete it.

(ii) Analysis of “work stability”: “I am involved in the products with high acceptance in the market.” gets the maximum average score as the highest job satisfaction cognition. The data analysis indicates that if employees want to raise their satisfaction of work stability, they have to promote their products to the market and get a higher acceptance.

(iii) Analysis of “boss leadership”: “My boss in the professional field enough to be an example.” gets the maximum average score as the highest job satisfaction cognition. The data analysis indicates that if employees want to raise their satisfaction of boss leadership, their boss’s expertise has to be an example in the professional field.

(iv) Analysis of “salary”: “I am satisfied with other welfare and benefits besides salary.” gets the maximum average score as the highest job satisfaction cognition. The data analysis indicates that if employees want to raise their salary satisfaction, companies have to have a good salary structure.

(v) Analysis of “organizational management”: “My company often offers opportunities for educational training.” gets the maximum average score as the highest job satisfaction cognition. The data analysis indicates that if employees want to raise their organizational management, then the company has to have good management systems.

(vi) Analysis of “promotion”: no item is above the average score, which means that the satisfaction is relatively low. The data analysis indicates that if the overall sampled staffs want to raise their promotion satisfaction, the company has to have a promotion system with equity, justice and perfection.

(vii) Analysis of “work environment”: “My company rewards staffs to innovate production process.” gets the maximum average score as the highest job satisfaction cognition. The data analysis indicates that if employees want to raise their work environment satisfaction, companies have to be equipped with novel experimental equipments and reward their staffs to innovate production process.

(viii) Analysis of “interpersonal relationship”: “I have a pleasant time getting along with my colleagues.” gets the maximum average score as the highest job satisfaction cognition. The data analysis indicates that if employees want to raise their satisfaction of “interpersonal

relationship’, they first have to do the same thing as the foregoing.

### **Analysis of differences of work value and job satisfaction for sampled employees with background variables**

#### **Gender**

The analysis of data with different genders shows no significant differences on their work value and no remarkable differences on their job satisfaction as well.

#### **Age**

In work value, the analysis of data shows that the sampled staffs aged 26 to 30 have significant differences on “social status” and “responsibility” that demonstrate their highest work value cognition, and no conspicuous differences on other variables. In job satisfaction, the analysis of data shows that the sampled staffs aged 26 to 30 have significant differences on “interpersonal relationship” that demonstrate their highest job satisfaction cognition, and no conspicuous differences on other variables.

#### **Marital status**

The analysis of data with different marital status shows no significant differences on their work value. In job satisfaction, it shows that married staffs have much lower satisfaction on “promotion” in comparison with single staffs, and no remarkable differences on other variables.

#### **Education**

The analysis of data with different education shows no significant differences on their work value and no remarkable differences on their job satisfaction as well.

#### **Job titles**

The analysis of data with different job titles shows no significant differences on their work value and no remarkable differences on their job satisfaction as well.

#### **Work years**

In work value (shown Table 2), the analysis of data with different work years shows a significant difference on “social status” that cognition degrees of sampled staffs with 1 to 5 work years are higher than those with less than one year and 6 years (or more), and no conspicuous differences on other variables. In job satisfaction (shown

**Table 2.** With different work years, employees' work value of the ANOVA.

Variable	Work years	N	M	SD	Source of variation	Ss	df	Ms	F	afterward comparison
Work honor	Less than 1 year	46	16.52	2.56	Gb	7.47	2	3.74	0.66	NS
	1-5 years	302	16.94	2.23	Gw	2631.23	468	5.62		
	6 years (or more)	123	16.95	2.62	Sum	2638.70	470			
Work involvement	Less than 1 year	46	18.00	1.69	Gb	1.61	2	0.81	0.23	NS
	1-5 years	302	18.04	1.88	Gw	1665.35	468	3.56		
	6 years (or more)	123	18.16	1.96	Sum	1666.96	470			
Attitude to salary	Less than 1 year	46	10.50	1.49	Gb	7.51	2	3.76	1.89	NS
	1-5 years	302	10.83	1.36	Gw	929.37	468	1.99		
	6 years (or more)	123	10.60	1.51	Sum	936.88	470			
Social status	Less than 1 year	46	9.46	1.81	Gb	33.47	2	16.74	7.32*	1 < 2
	1-5 years	302	10.25	1.36	Gw	1070.35	468	2.29		3 < 2
	6 years (or more)	123	9.85	1.74	Sum	1103.83	470			
Having initiative	Less than 1 year	46	9.83	1.68	Gb	3.82	2	1.91	0.80	NS
	1-5 years	302	10.09	1.50	Gw	1111.12	468	2.37		
	6 years (or more)	123	10.16	1.59	Sum	1114.93	470			
Responsibility	Less than 1 year	46	17.07	2.18	Gb	15.59	2	7.80	1.74	NS
	1-5 years	302	17.68	2.02	Gw	2101.62	468	4.49		
	6 years (or more)	123	17.67	2.32	Sum	2117.21	470			

\* P &lt; 0.05.

in Table 3), the analysis of data with different work years shows a significant difference on "work environment" that cognition degrees of sampled staffs with 1 to 5 work years are higher than those with less than one year, and no remarkable differences on other variables.

### Work experience

Table 4, the analysis of data with work

experience shows no significant differences on their work value. In job satisfaction, the analysis of data with different work experience shows a significant difference on "boss leadership" that satisfaction degrees of sampled staffs with work experience are higher than those with no work experience, and no remarkable differences on other variables. Correlation analysis of work value and job satisfaction (shown Table 5); there are no significant correlation between each other such as attitude toward salary and work

specification, attitude toward salary and work environment, work involvement and salary, work involvement and organizational management. Others are existing positive correlation.

Work honor in terms of job satisfaction, is moderate positive correlation with work specification, work stability, boss leadership, promotion, work environment and interpersonal relationship; and is low positive correlation with salary and organizational management. Work environment, in terms of job satisfaction, is moderate positive

**Table 3.** With different work years, employees' job satisfaction of the ANOVA.

Variable	Work years	N	M	SD	Source of variation	Ss	df	Ms	F	Afterward comparison
Work specification	Less than 1 year	46	12.24	2.16	Gb	19.51	2	9.76	2.26	NS
	1-5 years	302	12.90	2.05	Gw	2021.38	468	4.32		
	6 years (or more)	123	12.96	2.13	Sum	2040.89	470			
Work stability	Less than 1 year	46	13.50	2.10	Gb	12.76	2	6.38	2.09	NS
	1-5 years	302	13.95	1.61	Gw	1426.31	468	3.05		
	6 years (or more)	123	13.66	1.92	Sum	1439.07	470			
Boss leadership	Less than 1 year	46	12.85	2.11	Gb	6.69	2	3.35	0.62	NS
	1-5 years	302	12.75	2.38	Gw	2530.05	468	5.41		
	6 years (or more)	123	12.50	2.28	Sum	2536.74	470			
Salary	Less than 1 year	46	12.41	2.38	Gb	1.05	2	0.52	0.10	NS
	1-5 years	302	12.47	2.22	Gw	2364.98	468	5.05		
	6 years (or more)	123	12.37	2.26	Sum	2366.03	470			
Organizational management	Less than 1 year	46	9.87	1.19	Gb	0.98	2	0.49	0.28	NS
	1-5 years	302	9.91	1.37	Gw	811.12	468	1.73		
	6 years (or more)	123	9.80	1.24	Sum	812.10	470			
Promotion	Less than 1 year	46	5.96	1.30	Gb	4.10	2	2.05	1.02	NS
	1-5 years	302	6.01	1.37	Gw	937.78	468	2.00		
	6 years (or more)	123	5.80	1.58	Sum	941.88	470			
Work environment	Less than 1 year	46	15.33	2.76	Gb	32.35	2	16.18	3.07*	1 < 2
	1-5 years	302	16.22	2.10	Gw	2468.99	468	5.28		
	6 years (or more)	123	16.16	2.55	Sum	2501.34	470			
Interpersonal relationship	Less than 1 year	46	14.87	1.52	Gb	6.17	2	3.08	1.12	NS
	1-5 years	302	15.24	1.58	Gw	1289.17	468	2.76		
	6 years (or more)	123	15.28	1.88	Sum	1295.34	470			

\*P &lt; 0.05.

correlation with work specification; and is low positive correlation with work stability, boss

leadership, promotion, work environment and interpersonal relationship. Social status, in terms

of job satisfaction, is low positive correlation with work stability, boss leadership, salary,



**Table 4.** With different work experience, employees' job satisfaction of t test.

Variable	Work experience	N	M	SD	t
Work specification	Yes	366	12.84	2.10	-0.34
	No	105	12.91	2.02	
Work stability	Yes	366	13.79	1.72	-0.83
	No	105	13.95	1.85	
Boss leadership	Yes	366	12.57	2.22	-2.08*
	No	105	13.10	2.62	
Salary	Yes	366	12.42	2.21	-0.44
	No	105	12.52	2.36	
Organizational management	Yes	366	9.87	1.28	-0.31
	No	105	9.91	1.44	
Promotion	Yes	366	5.92	1.42	-0.95
	No	105	6.07	1.40	
Work environment	Yes	366	16.11	2.26	-0.12
	No	105	16.14	2.47	
Interpersonal relationship	Yes	366	15.16	1.62	-1.37
	No	105	15.41	1.79	

P < 0.05.

organizational management, promotion and interpersonal relationship. Having initiative, in terms of job satisfaction, is moderate positive correlation with work specification, work stability, salary and work environment; and is low positive correlation with boss leadership, organizational management, promotion and interpersonal relationship. Responsibility, in terms of job satisfaction, is moderate positive correlation with work specification, work stability, work environment and interpersonal relationship; and is low positive correlation with boss leadership, salary, organizational management and promotion.

## Conclusions

The study aims to investigate the correlation between work value and job satisfaction of notebook testing department staffs. The theory framework is constructed based on literature review and a "Work Value and Job Satisfaction" Questionnaire. Through the analysis of the questionnaire, the research results and recommendations are made.

"Work value" cognition of notebook testing department staffs with different background variables is affected by age and work years, but not affected by gender, marital status, education levels, job titles and work experience. "Job satisfaction" cognition of notebook testing Department staffs with different background variables is

affected by age, marital status, work years and work experience, but not affected by gender, education levels and job titles. Suggestions provided by the testing department staffs in global top five notebook OEMs according to their personal experience and observation. The study adopted issues in semi-opened questionnaires for investigation. Sampled interviewees provided their concrete suggestions and the summaries were analyzed in the following:

a. Staffs' viewpoints on the advantages and disadvantages of servicing in top five notebook testing departments.

Advantages: Most of employees deem that they can get innovative technology information from work and that big companies are of high reputation, large scale, vision and human management systems.

Disadvantage: Most of employees think that board should be improved in cafeteria; fewer chances for business trips and fewer share quotas; and those companies tend to ignore the rights and existence of staffs in testing department

b. Staffs' viewpoints on the satisfaction and dissatisfaction in top five notebook testing departments.

i. Satisfaction: Employees are mostly satisfied with good

**Table 5.** Correlation results between work value and job satisfaction.

Variable	Work specification	Work stability	Boss leadership	Salary	Organizational management	Promotion	Work environment	Interpersonal relationship
Work honor	0.591***	0.370***	0.380***	0.282***	0.235***	0.412***	0.532***	0.334***
Work involvement	0.385***	0.198***	0.298***	0.039	0.064	0.237***	0.313***	0.216***
Attitude to salary	-0.023	0.090*	0.129*	0.292***	0.205***	0.113**	0.004	0.118*
Social status	0.417***	0.657***	0.141*	0.405***	0.316***	0.235***	0.520***	0.236***
Having initiative	0.508***	0.281***	0.507***	0.405***	0.408***	0.512***	0.606***	0.200***
Responsibility	0.511***	0.335***	0.321***	0.248***	0.257***	0.307***	0.541***	0.438***

\*\*\* p=.001; \*\* p=.01; \* p=.05.

welfare benefits, harmonious relationship with others and good centripetal force.

ii. Dissatisfaction: Employees are mostly not satisfied with low wages, few chances for overseas training and the standardization work mode.

iii. Strategies for companies to increase employees' work value and job satisfaction: Give approvals, encouragement and pay raise to employees timely. Put emphasis on company's all-around development, offering the same welfare benefits for branches. Purchase more innovative experimental testing equipments. Listen to employees more. Provide colorful life quality. Increase education training chances outside the company. Create self-brand and launch the brand internationalization. Reduce the oral arguments between bosses and employees.

## RECOMMENDATIONS

Establish good promotion systems and organizational management. Motivate honor and responsibility sense of employees. Update experimental facilities always. Maintain high-quality testing method.

a. List annual budget so that departments can purchase innovative testing equipments for the needs of testing precision.

b. Give approvals and encouragement to employees timely, and offer a chance of promotion with the way of fairness and justice.

c. Arrange various educations training opportunities to enhance employees' professional and technical competences, and based on professional testing needs conduct presentation and experience sharing.

d. Provide fine communication means between bosses and employees, such as using web-based platforms or telephone equipments to offer some positive suggestions for product quality or production procedure and to minimize their oral arguments as well and then create a fusion enterprise culture.

e. Use precious and exact testing techniques to ensure the product quality and then build company reputation for sustainable development.

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