

5. Conclusions, implications and further research areas

5.1 Conclusion and implications

The purpose of this research was to study the factors that motivate IT professionals in Sri Lanka, under consideration of individual characteristics. In this research Herzberg's two-factor theory and Hackman-Oldman job characteristics model were used to evaluate research objectives. In addition to that this study provided an opportunity to study and understand the factors that motivate IT professionals in the software development company in Sri Lanka. This study aims to provide IT managers in Sri Lanka with current view of the motivational needs of their IT professional, and with some recommendations for satisfying those needs in order to increase productivity.

This study confirmed that most of the hygiene factors which were defined by Herzberg's theory, moved towards the motivation direction while most of the motivation factors which were defined by Herzberg's theory, become less important motivation factors. This situation implied that order of finding of this study was not equivalent with order of finding of initial Herzberg's theory. In overall, the achievement was the highest ranked factor in current study and advancement was the lowest ranked factor. According to the groupings, the achievement was the highest ranked factor across most of groupings. Meanwhile advancement was consistently lower ranked factor across all groupings except managers. That means regardless demographic grouping and number of employees in the company, higher ranking factors and lower ranking factors in the Herzberg's theory were ranked same in the current study with little variation pattern. It implied that importances of IT professional's needs are similar irrespectively of demographic groupings and number of employees in the company in Sri Lanka. IT managers/employers need to pay special attention with factors ranked higher and lower when designing jobs and motivating IT professionals.

In overall results of the study confirmed that task significance factor has contributed for the most preferred job characteristics factor meanwhile feedback has contributed for the less preferred job characteristics factor according to factors in Hackman-Oldman job characteristics model. In addition to that skill variety was ranked as second lower factor.

According to the groupings, similar pattern exist with little variation. Especially when number of employees in the company becomes larger with respect to the number of employees; task significance was ranked as the lowest factor even though it was ranked as the most preferred job characteristics in overall ranking and most of the other groups. Therefore when company becomes larger with respect to the number of employees, managers/employers need to critically evaluate this factor as well. Apart from that outcome of this study indicated that feedbacks and skill variety are very little in the software company but giving special attention to those areas, work motivation can be improved significantly in IT professional's since they prefer continuous feedback and skill variety in their job.

When comparing motivational potential scores of two-factor theory and job characteristics model with demographics grouping and number of employees in the company, variation patterns were almost similar. This study confirmed that most effective work motivation method for IT professionals in Sri Lanka was job characteristics rather than their personal needs.



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5.2 Further research areas

Motivation is a continual process and needs to be sustained and developed as individual and organizational factors change over time. It may be of interest to have a continuous view of what motivates the IT professionals and provides them with satisfaction. Furthermore, it may be interesting to compare the received results with similar surveys done in the same industry. Unfortunately, such data is not accessible in Sri Lanka, therefore, it may be recommended to do a new survey within the reasonable time frame in order to determine the degree of job satisfaction and to figure out the factors, which are valued and lacked by the respective subgroups towards their work motivation. A comparison of the surveys may provide the IT Company with useful information about the success or failure of changes regarding the work and the development in the job satisfaction of the IT professionals.

This study is an attempt to understand profile of motivation factors of IT professionals. However the study scope could be broadened to include larger number of software companies and IT professionals with different demographics profiles.

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Appendix A

Questionnaire for MBA Research Study of factors that motivate IT professionals in Sri Lanka

Dear Sir/Madam,

I am a postgraduate student of Moratuwa University, engaged in a research study on the "Study of factors that motivate IT professionals in Sri Lanka" as a partial fulfillment of the Master of Business Administration (MBA in IT) degree program.

This questionnaire is a part of the research study. I would appreciate if you could spare 10 minutes of your precious time to fill the questionnaire.

Information contained in this questionnaire will remain completely confidential and be used solely for the academic purposes. Further, I am not requesting you to provide your name, company name etc, as I want to assure your anonymity.

Thank you.

K.M.I.M. Kumara (manoj_kumara@hotmail.com)

Please indicate following experience with respect to the current employer by answering the questions.



University of Moratuwa, Sri Lanka.

In this part you are asked to describe actual situation at work in column (a) considering under mentioned personal needs, whereas in column (b) you are asked to indicate how satisfied/dissatisfied you are with the respective personal needs.

Please mark the appropriate box, which is the most accurate description of actual situation at work and your level of satisfaction/dissatisfaction with the respective personal needs considering **current job in the current company** by answering following questions.

Please note the followings:

4 – Very high 3 - High 2 - Low 1 - Very low

A – Very satisfied B – Satisfied C- Dissatisfied D – Very dissatisfied

To what extent do you feel that		(a) Describe actual situation at work				(b) Your satisfaction			
		Very high 4	3	2	Very low 1	Very satisfied A	B	C	Very dissatisfied D
1.1	you can successfully complete the assigned tasks of the job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	you have been recognized by peers/supervisors for your performance and competence that you have been put to use on the job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent do you feel that		(a) Describe actual situation at work				(b) Your satisfaction			
		Very high 4	3	2	Very low 1	Very satisfied A	B	Very dissatisfied C	D
1.3	work related tasks are challenging?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	work related tasks are interesting?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5	work related tasks are meaningful?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.6	work related tasks are creative?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.7	you are able to make job related dedications with minimum supervision?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.8	you get promotion in the hierarchy/improvement in the professional status?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.9	you get opportunities to develop your competence?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.10	you are comfortable with company procedures and rules of doing things?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.11	you get guidance/support from your supervisor to perform the tasks of the job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.12	you are comfortable with your interpersonal relationship with supervisor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.13	you are comfortable with your interpersonal relationship with your peers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.14	you are comfortable with your interpersonal relationship with your subordinates?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.15	you are provided with necessary physical working conditions such as light, temperature, furniture, space, tools to perform your job successfully?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.16	you are remunerated fairly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.17	your work life make you feel more comfortable in your personal life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.18	you are comfortable as a person being an IT professional?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.19	you are comfortable in your current position in the society?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.20	secure in your position in your company in terms of layoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 2

In this part you are asked to *describe actual situation at work* in column (a) considering under mentioned job features, whereas in column (b) you are asked to *indicate how satisfied/dissatisfied* you are with the respective job features.

Please mark the appropriate box, which is the most accurate description of actual situation at work and your level of satisfaction/dissatisfaction with the respective job features considering *current job in the current company* by answering following questions.

Please note the followings:

5 – Very high 4 – High 3 – Moderate 2 - Low 1 - Very low

A – Very satisfied B – Satisfied C – Moderate D - Dissatisfied

E – Very dissatisfied

To what extent does your job		(a) Describe actual situation at work					(b) Your satisfaction				
		Very high 5	4	3	2	Very low 1	Very satisfied A	B	C	D	Very dissatisfied E
2.1	require you to use several skills and abilities that you have?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2	allow you to complete an entire piece of work from beginning to end?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3	interest for you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4	has a meaning or importance in the company with respect to the task that you perform?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.5	give you freedom /independence to decide (on your own) how and when the work is done?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.6	itself provide you information about your work performance/ effectiveness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.7	has a built-in mechanism for you to receive information about your work performance from peers/superiors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 3

General Information

- 3.1) Your age: 28 or below 29-32 33-36 More than 36
- 3.2) Your gender: Male Female
- 3.3) Your civil status: Single Married Divorced Widowed
- 3.4) Your highest **educational** qualification: Graduate Post Graduate
 Other (Please specify) :-
- 3.5) Your highest **professional** qualification:
Please specify (**BCS, ACS, IESL, IEE** etc.) :-
 Fully Qualified Partially Qualified Other (Please specify) :-
- 3.6) Your designation in the company: Manager Programmer
 Technical Consultant Other (Please specify) :-
- 3.7) Years of service you have in the current IT Company:
 Less than 2 2-4 5-7 More than 7
- 3.8) Years of **total service** you have in the IT field:
 Less than 4 4-7 8-11 More than 11
- 3.9) No of employees in your company:
 Less than 50 50-100 101-200 201 -500
 501-1000 More than 1000

I am most grateful for your contribution to my research.

Appendix B

Table B.1 Sample profile without combining small number of observation

Demographics factors		Count	
Age	28 or below	77	
	29-32	51	
	33-36	24	
	More than 36	7	
Gender	Male	118	
	Female	41	
Civil status	Single	88	
	Married	71	
	Divorced	0	
	Widowed	0	
Educational qualification	Graduate	142	
	Post Graduate	17	
	Others	0	
Designation	Manager	15	
	Programmer	124	
	Technical	8	
	Consultant	12	
	Others	0	
	Service in current company	Less than 2	60
	2-4k	44	
	5-7	42	
Total service in IT field	Less than 4	76	
	4-7	62	
	8-11	20	
	More than 11	1	
No of employees	Less than 50	26	
	50-100	9	
	101-200	17	
	201-500	95	
	501-1000	0	
	More than 1000	12	

Table B.2 Overall ranking of Herzberg's factors according to descending order of motivation

Rank	Herzberg's factors	Motivator (%)	Hygiene (%)	Neutral (%)
1	Achievement	95.6	1.9	2.5
2	Relationship with peers	94.9	1.3	3.8
3	Relationship with supervisor	93.0	5.7	1.3
4	Relationship with subordinates	91.6	3.5	4.9
5	Status	90.5	1.3	8.2
6	Responsibility	85.6	11.3	3.1
7	Working condition	84.3	11.3	4.4
8	Supervision	81.7	14.5	3.8
9	Recognition	76.6	16.4	7.0
10	Company policy & administration	73.6	21.4	5.0
11	Work itself	72.9	17.0	10.1
12	Security	71.8	15.4	12.8
13	Personal life	64.3	25.5	10.2
14	Salary	60.7	34.2	5.1
15	Growth	60.2	35.4	4.4
16	Advancement	30.2	55.3	14.5



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Table B.3 Percentage value of Herzberg's factors with respect to age and gender

Herzberg's factors	Age									Gender					
	28 or below			29-32			33 or more			Male			Female		
	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)
Achievement	96.1%	2.6%	1.3%	94.1%	2.0%	3.9%	96.8%	0.0%	3.2%	94.1%	2.5%	3.4%	100.0%	0.0%	0.0%
Recognition	81.6%	13.1%	5.3%	74.5%	13.7%	11.8%	67.8%	29.0%	3.2%	76.9%	15.4%	7.7%	76.0%	19.5%	4.5%
Work itself	75.3%	14.3%	10.4%	74.3%	19.8%	5.9%	64.5%	19.4%	16.1%	70.3%	19.5%	10.2%	80.4%	9.8%	9.8%
Responsibility	84.4%	13.0%	2.6%	84.3%	11.8%	3.9%	90.3%	6.5%	3.2%	83.1%	12.7%	4.2%	92.7%	7.3%	0.0%
Advancement	38.9%	48.6%	12.5%	20.4%	63.3%	16.3%	25.8%	58.1%	16.1%	25.2%	59.1%	15.7%	46.0%	43.2%	10.8%
Growth	67.1%	26.3%	6.6%	62.8%	33.3%	3.9%	38.7%	61.3%	0.0%	56.8%	38.1%	5.1%	70.0%	27.5%	2.5%
Company policy & administration	81.8%	14.3%	3.9%	58.8%	35.3%	5.9%	77.4%	16.1%	6.5%	67.8%	27.1%	5.1%	90.2%	4.9%	4.9%
Supervision	89.6%	6.5%	3.9%	74.0%	19.6%	6.4%	74.2%	25.8%	0.0%	78.9%	16.9%	4.2%	90.3%	7.3%	2.4%
Relationship with supervisor	94.8%	5.2%	0.0%	90.0%	8.0%	2.0%	93.6%	3.2%	3.2%	92.3%	6.0%	1.7%	95.1%	4.9%	0.0%
Relationship with peers	98.7%	1.3%	0.0%	90.2%	0.0%	9.8%	93.1%	2.1%	3.2%	95.0%	4.2%	0.6%	95.2%	2.4%	2.4%
Relationship with subordinates	95.5%	3.0%	0.0%	89.4%	2.1%	8.5%	85.8%	7.1%	7.1%	90.5%	3.8%	5.7%	94.6%	2.7%	2.7%
Working condition	88.3%	7.8%	0.0%	80.4%	11.8%	7.8%	80.6%	19.4%	6.0%	84.7%	10.2%	5.1%	83.0%	14.6%	2.4%
Salary	67.5%	27.3%	0.0%	46.0%	48.0%	6.0%	67.5%	29.0%	3.5%	58.1%	36.8%	5.1%	68.3%	26.8%	4.9%
Personal life	67.4%	20.8%	11.8%	50.0%	40.0%	10.0%	80.0%	13.3%	6.7%	62.1%	27.6%	10.3%	70.7%	19.5%	9.8%
Status	90.9%	3.9%	5.2%	84.1%	5.9%	10.0%	80.3%	6.8%	12.9%	83.0%	6.8%	10.2%	97.6%	0.0%	2.4%
Security	81.8%	7.8%	10.4%	60.4%	25.0%	14.6%	64.1%	19.4%	16.5%	67.6%	17.9%	14.5%	84.6%	7.7%	7.7%



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Table B.4 Percentage value of Herzberg's factors with respect to civil status and designation

Herzberg's factors	Civil status						Designation											
	Single			Married			Manager			Programmer			Technical			Consultant		
	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)
Achievement	95.5%	3.4%	1.1%	95.8%	0.0%	4.2%	93.3%	0.0%	6.7%	95.2%	2.4%	2.4%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Recognition	82.8%	12.6%	4.6%	69.0%	21.1%	9.9%	86.6%	6.7%	6.7%	74.8%	18.7%	6.5%	62.5%	12.5%	25.0%	91.7%	8.3%	0.0%
Work itself	76.1%	15.9%	8.0%	68.8%	18.3%	12.9%	80.0%	20.0%	0.0%	71.0%	18.5%	10.5%	87.5%	0.0%	12.5%	75.0%	8.3%	16.7%
Responsibility	87.5%	9.1%	3.4%	83.1%	14.1%	2.8%	86.7%	13.3%	0.0%	84.7%	12.9%	2.4%	87.5%	0.0%	12.5%	91.7%	0.0%	8.3%
Advancement	34.9%	49.4%	15.7%	24.7%	62.3%	13.0%	64.3%	28.6%	7.1%	26.7%	58.3%	15.0%	42.9%	57.1%	0.0%	18.2%	54.5%	27.3%
Growth	64.4%	27.6%	8.0%	54.9%	45.1%	0.0%	53.3%	46.7%	0.0%	60.2%	34.1%	5.7%	62.5%	37.5%	0.0%	66.7%	33.3%	0.0%
Company policy & administration	72.7%	19.3%	8.0%	74.7%	23.9%	1.4%	53.4%	33.3%	13.3%	76.6%	19.4%	4.0%	62.5%	37.5%	0.0%	75.0%	16.7%	8.3%
Supervision	84.1%	11.4%	4.5%	78.9%	18.3%	2.8%	79.6%	13.5%	6.9%	83.1%	13.7%	3.2%	87.5%	0.0%	12.5%	66.7%	33.3%	0.0%
Relationship with supervisor	92.0%	8.0%	0.0%	94.4%	2.8%	2.8%	100.0%	0.0%	0.0%	93.5%	5.7%	0.8%	100.0%	0.0%	0.0%	75.0%	16.7%	8.3%
Relationship with peers	94.4%	1.1%	4.5%	95.7%	1.4%	2.9%	86.5%	6.7%	6.8%	96.0%	0.8%	3.2%	100.0%	0.0%	0.0%	91.7%	0.0%	8.3%
Relationship with subordinates	93.7%	2.5%	3.8%	88.7%	4.8%	6.5%	86.4%	6.9%	6.7%	87.0%	2.7%	5.4%	100.0%	0.0%	0.0%	87.5%	12.5%	0.0%
Working condition	84.0%	12.4%	3.6%	84.5%	11.3%	4.2%	85.7%	13.3%	1.0%	85.0%	12.1%	4.9%	100.0%	0.0%	0.0%	83.4%	8.3%	8.3%
Salary	66.0%	23.5%	10.5%	54.3%	40.0%	5.7%	53.2%	46.8%	0.0%	61.0%	33.3%	5.7%	50.0%	50.0%	0.0%	75.0%	16.7%	8.3%
Personal life	62.1%	23.8%	14.0%	67.0%	29.1%	13.9%	62.9%	50.0%	7.1%	65.8%	23.6%	10.6%	50.0%	37.5%	12.5%	83.4%	8.3%	8.3%
Status	90.9%	3.4%	5.7%	81.7%	7.0%	11.3%	73.3%	6.7%	20.0%	88.7%	4.0%	7.3%	100.0%	0.0%	0.0%	75.0%	16.7%	8.3%
Security	77.9%	12.8%	9.3%	64.3%	18.6%	17.1%	60.0%	13.3%	26.7%	73.6%	15.7%	10.7%	87.5%	0.0%	12.5%	58.3%	25.0%	16.7%

Table B.5 Percentage value of Herzberg's factors with respect to current service and total service

Herzberg's factors	Service in current company									Total service in IT field								
	Less than 2			2-4			5 or more			Less than 4			4-7			8 or more		
	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)
Achievement	95.0%	5.0%	0.0%	97.7%	0.0%	2.3%	94.5%	5.5%	0.0%	96.1%	2.6%	1.3%	95.2%	1.6%	3.2%	95.2%	0.0%	4.8%
Recognition	83.3%	15.0%	1.7%	81.4%	9.3%	9.3%	65.5%	23.6%	10.9%	88.2%	9.2%	2.6%	62.2%	23.0%	14.8%	76.2%	23.8%	0.0%
Work itself	81.7%	5.0%	13.3%	81.8%	15.9%	2.3%	56.4%	30.9%	12.7%	84.2%	7.9%	7.9%	56.5%	27.4%	16.1%	81.0%	19.0%	0.0%
Responsibility	85.0%	11.7%	3.3%	86.4%	9.1%	4.5%	85.5%	12.7%	1.8%	87.9%	7.9%	4.2%	80.7%	16.1%	3.2%	90.5%	9.5%	0.0%
Advancement	32.2%	48.2%	19.6%	37.2%	44.2%	18.6%	22.6%	71.7%	5.7%	32.4%	46.5%	21.1%	28.4%	63.3%	8.3%	28.6%	61.9%	9.5%
Growth	72.9%	18.6%	8.5%	66.0%	29.5%	4.5%	41.8%	58.2%	0.0%	73.3%	20.0%	6.7%	50.0%	46.8%	3.2%	42.9%	57.1%	0.0%
Company policy & administration	83.3%	11.7%	5.0%	61.4%	34.1%	4.5%	72.7%	21.8%	5.5%	80.3%	15.8%	3.9%	64.5%	29.0%	6.5%	76.1%	19.0%	4.9%
Supervision	88.3%	6.7%	5.0%	77.2%	20.5%	2.3%	78.2%	18.2%	3.6%	84.0%	10.7%	5.3%	79.1%	17.7%	3.2%	80.8%	19.2%	0.0%
Relationship with supervisor	94.9%	3.4%	1.7%	88.6%	9.1%	2.3%	94.4%	5.6%	0.0%	93.3%	4.0%	2.7%	90.3%	9.7%	0.0%	100.0%	0.0%	0.0%
Relationship with peers	96.6%	1.7%	1.7%	97.6%	0.0%	2.4%	90.9%	4.8%	7.3%	97.4%	1.3%	1.3%	61.9%	0.0%	8.1%	95.0%	5.0%	0.0%
Relationship with subordinates	92.4%	3.8%	3.8%	95.0%	2.5%	2.5%	88.0%	4.0%	8.0%	92.3%	4.6%	3.1%	89.1%	3.4%	6.9%	94.7%	0.0%	5.3%
Working condition	88.4%	5.0%	3.3%	80.9%	6.8%	2.3%	74.3%	18.2%	8.9%	90.8%	5.3%	3.9%	75.8%	17.7%	6.5%	85.7%	14.3%	0.0%
Salary	71.6%	5.0%	1.7%	54.6%	40.9%	4.5%	53.7%	37.0%	9.3%	67.2%	28.9%	3.9%	49.2%	42.6%	8.2%	71.4%	28.6%	0.0%
Personal life	71.7%	16.3%	10.0%	60.0%	29.5%	20.5%	67.8%	30.2%	1.9%	68.4%	21.1%	10.5%	55.7%	32.8%	11.5%	75.0%	20.0%	5.0%
Status	90.0%	6.7%	3.3%	86.3%	2.3%	11.4%	83.6%	5.5%	10.9%	86.8%	5.3%	7.9%	87.1%	3.2%	9.7%	85.5%	9.6%	4.9%
Security	80.0%	11.7%	8.3%	74.4%	16.3%	9.3%	52.3%	18.9%	28.8%	78.9%	13.2%	7.9%	61.1%	20.3%	18.6%	75.8%	9.6%	14.6%

Table B.6 Percentage value of Herzberg's factors with respect to number of employees

Herzberg's factors	No of employees											
	Less than 50			50-200			201-500			501 or more		
	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)	Motivator (%)	Hygiene (%)	Neutral (%)
Achievement	96.2%	3.8%	0.0%	100.0%	0.0%	0.0%	94.7%	1.1%	4.2%	100.0%	0.0%	0.0%
Recognition	72.0%	20.0%	8.0%	97.9%	2.1%	0.0%	73.5%	18.1%	8.4%	66.7%	25.0%	8.3%
Work itself	91.1%	7.7%	1.2%	92.3%	0.0%	7.7%	59.4%	28.0%	12.6%	65.8%	25.9%	8.3%
Responsibility	73.1%	26.9%	0.0%	88.5%	11.5%	0.0%	88.4%	7.4%	4.2%	83.4%	8.3%	8.3%
Advancement	20.9%	58.3%	20.8%	61.5%	30.8%	7.7%	24.2%	60.4%	15.4%	21.6%	69.3%	9.1%
Growth	56.0%	40.0%	4.0%	77.0%	19.2%	3.8%	56.8%	37.9%	5.3%	58.3%	41.7%	0.0%
Company policy & administration	50.0%	46.2%	3.8%	84.7%	11.5%	3.8%	82.1%	13.7%	4.2%	33.3%	50.0%	16.7%
Supervision	77.0%	19.2%	3.8%	80.8%	11.5%	7.7%	85.5%	11.6%	2.9%	65.2%	26.5%	8.3%
Relationship with supervisor	88.0%	12.0%	0.0%	96.5%	3.5%	0.0%	92.6%	5.3%	2.1%	91.7%	8.3%	0.0%
Relationship with peers	94.0%	2.2%	3.8%	92.4%	3.8%	3.8%	93.7%	2.1%	4.2%	98.9%	1.1%	0.0%
Relationship with subordinates	87.0%	4.3%	8.7%	88.0%	8.0%	4.0%	92.7%	2.4%	4.9%	96.7%	3.3%	0.0%
Working condition	89.5%	2.5%	4.0%	84.4%	11.8%	3.8%	88.1%	11.5%	3.3%	82.8%	8.9%	8.3%
Salary	42.3%	50.0%	7.7%	73.1%	26.9%	0.0%	69.6%	26.1%	4.3%	32.3%	51.0%	16.7%
Personal life	30.7%	69.7%	23.1%	31.1%	59.8%	28%	72.0%	18.3%	9.7%	31.3%	68.7%	0.0%
Status	84.7%	3.8%	11.5%	91.2%	1.1%	7.7%	87.4%	8.4%	4.2%	64.5%	2.2%	33.3%
Security	69.3%	26.9%	3.8%	84.0%	4.0%	12.0%	70.9%	15.1%	14.0%	58.1%	16.9%	25.0%



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Table B.7 Categorization of demographics factors with the job characteristics

Demographics		Skill Variety	Task identity	Task significance	Autonomy	Feedback
Age	28 or below	3.49	3.51	3.82	3.76	3.44
	29-32	3.52	3.45	3.54	3.61	3.24
	33 or more	3.42	3.61	3.69	3.65	3.26
Gender	Male	3.46	3.45	3.69	3.72	3.29
	Female	3.56	3.67	3.74	3.60	3.48
Civil status	Single	3.53	3.60	3.78	3.77	3.41
	Married	3.43	3.39	3.61	3.58	3.26
Designation	Manager	3.57	3.27	3.53	3.50	3.35
	Programmer	3.44	3.48	3.68	3.67	3.32
	Technical	3.63	3.69	3.75	3.74	3.38
	Consultant	3.71	4.04	4.15	4.08	3.56
Service in current company	Less than 2	3.63	3.61	3.93	3.78	3.47
	2-4	3.39	3.55	3.62	3.60	3.26
	5 or more	3.40	3.37	3.53	3.66	3.27
Total service in IT field	Less than 4	3.58	3.60	3.83	3.69	3.50
	4-7	3.40	3.41	3.55	3.65	3.17
	8 or more	3.40	3.50	3.71	3.79	3.25
No of employees	Less than 50	3.75	3.60	3.77	3.56	3.01
	50-200	3.69	4.02	3.99	3.79	3.52
	201-500	3.46	3.42	3.27	3.72	3.38
	501 or more	3.46	3.42	3.27	3.54	3.35



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Table B.8 Variation of MPS_{TFT} and MPS_{JCM} with demographics factors

Demographics		$MPS_{TFT}\%$	$MPS_{JCM}\%$
		Mean	Mean
Age	28 or below	45.61	38.63
	29-32	31.56	34.51
	33 or more	35.61	36.05
Gender	Male	36.65	36.30
	Female	46.37	38.24
Civil status	Single	42.80	38.94
	Married	34.63	34.15
Designation	Manager	39.35	34.18
	Programmer	38.72	35.99
	Technical	40.43	39.32
	Consultant	42.58	46.85
Service in current company	Less than 2	46.58	40.64
	2-4	39.15	34.10
	5 or more	31.06	34.79
Total service in IT field	Less than 4	45.27	39.49
	4-7	31.22	33.65
	8 or more	40.46	36.41
No of employees	Less than 50	32.23	33.73
	50-200	53.65	42.32
	201-500	38.96	36.52



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