

Research Article

The Study of Relationship between Knowledge Staff's Impartiality and Loyalty in Information Industry

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Abstract: The purpose of this study is to study whether there is a correlation between knowledge staff's sense of fairness and sense of loyalty and predict power of sense of fairness on the loyalty. The research is done in terms of questionnaire in which 160 effective knowledge staffs are interviewed, while questionnaire's reliability and validity were evaluated and the data from the survey is analyzed through SPSS 15.0 software by means of factor analysis, correlation analysis and regression analysis. The main conclusions of the study are as follows: 1. Intellectual staff's fair distribution, procedural impartiality, interactive impartiality are obviously related to the enterprise loyalty and can be used as predictors of it. 2. Knowledge staff's impartiality distribution is obviously related to loyalty and is helpful to explain and predict loyalty; 3. Knowledge staff's impartiality distribution and interactive impartiality are obviously related to professional loyalty and is helpful to explain or predict professional loyalty. 4. Intellectual staff's interactive impartiality is obviously related to benefits loyalty and is helpful to explain and predict professional loyalty benefits.

Keywords: Impartiality, information industry, knowledge staff, loyalty

INTRODUCTION

Knowledge staff is whose main capital is knowledge. Typical examples may include software engineers, doctors, architects, engineers, scientists, public accountants, lawyers and teachers, because they "think for a living" (Davenport, 2005). What differentiates knowledge work from other forms of work is its primary task of "non-routine" problem solving that requires a combination of convergent, divergent and creative thinking (Reinhardt *et al.*, 2011). Also, despite the amount of research and literature on knowledge work there is yet to be a succinct definition of the term (Pyörriä, 2005).

Knowledge staff can increasingly competitive in the market today, have increasingly been involved in the core competition business. A study by IBM notes that training, which produced an average productivity improvement of only 3 min/day, would save a company with 1,000 employees at least US \$240,000/year (Lusch *et al.*, 2007). Service is more of a competency than an asset, which is also why exceptional service is difficult to replicate in entirety, as opposed to an exceptional product, which can be replicated with relative ease. Competing through service is possible only when the whole organization is service dominant and the organization treats its employees as a valuable resource

competing through service is possible only when the whole organization is service dominant and the organization treats its employees as a valuable resource (Mcdermott, 2005). As everyone knows, the information industry is the leading industry of the national economy, is the catalyst for economic growth and the multiplier. IT industry as a high-knowledge industry, pays more attention to the management of knowledge staff, while the existing labor contract and incentive system cannot fundamentally ensure the highly-knowledgeable staff's loyalty. Knowledge staff spends 38% of their time searching for information. They are also often displaced from their bosses, working in various departments and time zones or from remote sites such as home offices and airport lounges (Greenberg, 2009).

Knowledge staff's loyalty in an enterprise reflects the level of human resources management. Job impartiality is an emotional reaction to overall job circumstances and different job factors like the supervisor, pay, coworkers, etc., (Brown and Peterson, 1993). The internal quality of the work environment also contributes to employee impartiality, which is measured by the feelings that employees have toward their job, colleagues and company (Heskett *et al.*, 1994). How to cultivate and exalt knowledge staff's loyalty and how to manage to strengthen Knowledge

staff's loyalty is a topic every enterprise must envisage. How should enterprises exalt their staff's loyalty and strengthen their human resources management level is an important measure to cope with the international competitions nowadays.

Loyalty is the interaction between enterprises and staff and the mutual impact of the common results. It is difficult to win loyal knowledge staff without impartiality. So, how to improve knowledge staff's loyalty and avoid outflow of knowledge staff become an important difficulty problem for human resource management. Therefore, exploring the relationship between knowledge staff's impartiality and loyalty and impartiality's prediction role to loyalty should be benefit for knowledge staff's potential development by taking properly measures and produce more effective.

In this study, we have interviewed 160 effective knowledge staffs in terms of questionnaire, evaluated questionnaire's reliability and validity and the data from the survey is analyzed through SPSS 15.0 software by means of factor analysis, correlation analysis and regression analysis. The objective of this study was to study whether there is a correlation between knowledge staff's sense of fairness and sense of loyalty and predict power of sense of fairness on the loyalty.

METHODOLOGY

Research model: In order to study the relationship between knowledge staff's impartiality and loyalty under the background of Chinese culture, combining with studying on the theories of past, this study put forward the following research model, as shown in Fig. 1.

Assumption: The following two assumptions are put forward pointing at study's issues.

Assumption 1: Significance correlation between each dimension of impartiality of knowledge staff and each dimension of knowledge staff's loyalty.

Assumption 2: Each dimension of impartiality of knowledge staff can predict and explain each dimension of knowledge staff's loyalty.

Questionnaire design: Questionnaire includes gauge of knowledge staff's impartiality and gauge of staff's loyalty.

The first part: Gauge of knowledge staff's impartiality includes three factors (fair distribution, fair procedure and fair solidarity) and seventeen indicators, at the same time, adopt Likert 5 analysis measures. All indicators need be scored correctly and respondents according to their real situation score for questionnaire description.

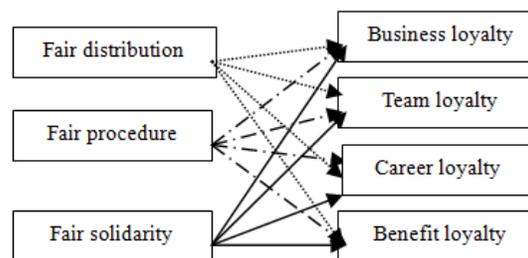


Fig. 1: Research model of the relationship between knowledge staff's impartiality and loyalty

The second part: Gauge of knowledge staff's impartiality includes four aspects including care of enterprises, team belong, best career and maintaining self-benefit and eighteen indicators, then adopt Likert5 analysis measures. All of them are forward scoring questions, which are given 1-5 sores according to disagree and agree strongly.

Statistical analysis: The study adopts factor analysis to check conceptual effect of questionnaire and use Cronbach's α to analysis loyalty and SPSS 15.0 to go on statistic analysis.

DATA ANALYSIS AND STATISTICAL RESULTS

Simple: The questionnaire mainly focuses on those who are knowledge staff in Computer Company. There are 239 questionnaires including 198 recycling, recycling rate of 83%, in which information is complete, in line with this study questionnaires to define knowledge, which are suitable for definition of knowledge staff owned bachelor degree or above in this study. Table 1 represents the performance of the questionnaire.

Loyalty of gauge and validity of detection: Analysis of impartiality and loyalty questionnaires, analysis to factors with principle components, adopt common factors' orthonormality turning treatment. Gauge KMO numerical value is 0.877 and 0.827, respectively. Barlett sphere testing numerical value is 962.401 and 985.893. Degree of freedom is 136 and 156. Probability Sig. is 0.000. Questionnaire possesses construct validity and there are common factors between parent groups' relative matrix, therefore, it can be used factor analysis.

Analysis to survey data, extracting three factors by Varimax shift named fair distribution, fair procedure, fair solidarity respectively after explanation to total amount of variation and add up to 60.245%. Analysis to factors, indicators of knowledge staff's loyalty arrive at four factors which explanation to total amount of

Table 1: A general survey of the sample

Background		Number of samples	(%)	Sample size
Sex	Male	88	55.0	160
	Female	72	45.0	160
Age	30 years old	45	28.1	160
	30 to 40 years old	99	61.9	160
	40 years old and older	16	10.0	160
Education	College	22	13.8	160
	Undergraduate	81	50.6	160
	Master	57	35.6	160
In this enterprise working hours	Less than a year	50	31.3	160
	1 to 5 years	84	52.5	160
	5 to 10 years	16	10.0	160
	more than 10 years	10	6.3	160
Post	General managers	87	54.4	160
	Lower managers	41	26.3	160
	Middle managers	25	15.6	160
	Senior managers	6	3.8	160

Table 2: Factorial analysis and Cronbach's α

Factor name	Measure phase	Factor loading	Explanation of variability (%)	Cronbach's α	Cronbach's α
Distribution impartiality	GP1 compensation reflected work hard of mine	0.847	25.74	0.925	0.936
	GP2 my compensation is fair compared with other colleagues	0.821			
	GP3 my compensation reflects my contribution to agency	0.800			
	GP4 in term of quality of my work and responsibility, my compensation is fair	0.730			
	GP5 my compensation is fair compared with colleagues owning the same work and position	0.723			
	GP6 in term of my work expression, my compensation is fair	0.641			
	GP7 in term of my work experience, my compensation is fair	0.602			
	GP8 in term of my work risk, my compensation is fair	0.625			
	GP9 distribution according to law	0.794			
	GP10 distribution is open and transparent	0.742			
	GP11 distribution system carries out very well	0.734			
	GP12 staff's take part in making process of distribution system	0.700			
	GP13 all people are equal facing distribution system	0.634			
	GP14 distribution system can represent the wishes of the majority	0.605			
Interactional impartiality	GP15 I can get some information about compensation	0.803	10.50	0.875	
	GP16 leaders can communicate sincerely	0.771			
	GP1 leaders can experience my difficulties fully	0.770			
Staff's loyalty	ZC1 my present company is ideal company	0.788	21.95	0.826	
	ZC2 I'd like to try my extra effort for present company	0.759			
	ZC3 I discover that my value is the same with my company's value	0.736			
	ZC4 I'm going to work in our company in more than two years	0.718			
Team loyalty	ZC5 I'm proud of working in this company	0.647	14.98	0.741	0.831
	ZC6 participating department activity eagerly	0.769			
	ZC7 I always strive for collective work as the direction of myself	0.710			
	ZC8 I put into effort to create a good team work	0.605			
Career loyalty	ZC9 if additional work is helpful to the department, I would like to do it	0.556	12.79	0.754	
	ZC10 I have never been absent, late or left earlier without any reasons	0.783			
	ZC11 taking time to read relevant professional magazines	0.654			
	ZC12 I will put my heart into work to make achievements	0.578			
	ZC13 I offer to complete my work with high quality	0.501			
Interests loyalty	ZC14 I stay in the company because it is hard to find such a good company treatment	0.750	11.60	0.719	
	ZC15 I think the chance is less , so I do not consider leaving the company	0.734			
	ZC16 If I left the company , it should bring losses to my family	0.680			
	ZC17 If I left the company, my work experiences and skills should be wasted	0.604			
	ZC18 If I left the company, I should lose established relationships	0.523			

Table 3: Analysis of impartiality and loyalty

		Enterprise loyalty	Team loyalty	Career loyalty	Interest loyalty
Distributive impartiality	Pearson correlation	0.184a	0.286b	0.177a	-0.098
	Sig. (2-tailed)	0.020	0.000	0.025	0.217
Procedure impartiality	Pearson correlation	0.656b	0.092	-0.006	-0.021
	Sig. (2-tailed)	0.000	0.246	0.938	0.796
Interactive impartiality	Pearson correlation	0.194a	0.106	0.265b	-0.202a
	Sig. (2-tailed)	0.014	0.181	0.001	0.001

a: Indicates significance level of 0.05 (bilateral), significantly correlated; b: Indicates significance level of 0.01 (bilateral), significantly correlated

Table 4: Regression analysis of impartiality and loyalty

Independent variable	Dependent variable	β	t	Sig.	F	R ²
Procedure impartiality	Enterprise loyalty	0.656	11.603	0.000	52.353	0.492
Interactive impartiality		0.194	3.433	0.001		
Distributive impartiality		0.184	3.264	0.001		
Distributive impartiality	Team loyalty	0.286	3.754	0.000	14.096	0.076
Interactive impartiality	Career loyalty	0.265	3.510	0.000	8.909	0.090
Distributive impartiality		0.177	2.345	0.001		
Interactive impartiality	Interest loyalty	-0.202	-2.587	0.011	6.693	0.035

variation has arrived at 61.322%. After testing all indicators, indicators are called business loyalty, team loyalty, career loyalty and benefit loyalty, respectively.

Reliability testing mainly adopts Cronbach's α to test impartiality and loyalty and consistent level of internal of gauge. Total Cronbach's α of impartiality gauge amount to 0.936, Cronbach's α of all factors are more than 0.8, which express internal data's compatibility is quite high and reliability of gauge is very good. Total Cronbach's α of loyalty gauge amount to 0.831, Cronbach's α of all factors are more than 0.7, which indicate data reliability is quite ideal and have better reliability. Table 2 show the factorial analysis and Cronbach's α of impartiality and loyalty questionnaires.

Analysis of relationship between impartiality and loyalty: We adopt Pearson analysis to study the dimensions of impartiality and loyalty to research on linear relationship and directions of variable because impartiality and loyalty are the spacer variables.

Table 3 shows that distributive impartiality is enterprise loyalty, team loyalty and career loyalty, but associations are weaker; procedure impartiality is in proportion to enterprise loyalty and associations are stronger. Interactive impartiality is positively correlated to team loyalty and career loyalty but associations are weaker. Interactive impartiality is negatively correlated to interest loyalty and associations are weaker. We can see the results supporting hypothesis 1. Between procedure impartiality and enterprise loyalty has the highest correlation coefficient of 0.656, which demonstrates that the two variables connect strongly.

Regression analysis of staff impartiality and loyalty: We adopt selection strategy to determine Independent variable, which it is based on distributive Impartiality, procedure impartiality and Interactive impartiality are Independent variable and enterprise loyalty, team loyalty and career loyalty interest loyalty are dependent variables. We study the effect of fixed independent

variable on dependent variables with multiple regression analysis. Table 4 shows the regression analysis of staff impartiality and loyalty.

We can see that we can get explanation and prediction by using linear model. Interactive impartiality and interactive impartiality and distributive impartiality's standardized coefficient is a positive number, which shows they are loyal to the enterprise positive effect. Procedure impartiality's standardized coefficient is 0.656, which shows that it is the most loyal to the enterprise. Interactive impartiality and distributive impartiality's standardized coefficient are 0.194 and 0.184, which shows enterprise loyalty is positively affected by them but less. The fair distribution of standardized coefficient is 0.286 for a positive number, which says it has the positive influence on the team loyalty, but the impact of low level. Interactive fair and distributive fair's standardized coefficient are 0.265 and 0.177, which shows they have the positive effect on career loyalty but the influence degree is low. Interactive fair standardized coefficient is 0.202 that is negative number, which shows it has negative effect on interest loyalty but degree is low.

CONCLUSION

- The knowledge staff's sense of impartiality has significant correlation with staff's loyalty. Distributive impartiality is correlated with interactive impartiality and procedure impartiality and their associations are positively. Distributive impartiality has the positively correlation with team loyalty; interactive impartiality is positively correlated with distributive impartiality and career loyalty. Interactive impartiality is negatively correlated with interest loyalty.
- Knowledge staff has ability to predict loyalty. Enterprise loyalty can be predicted by procedure impartiality and interactive impartiality and distributive Impartiality which can be a forecasting

index; Fair distribution of team loyalty have ability of forecast and explain, which can be forecasting index. Enterprise loyalty can be predicted by Interactive fair and distributive impartiality, which can be forecasting index for career loyalty. Interactive fair is able to predict and explain interest loyalty which can be explained as interest loyal predictor.

- The knowledge staff's loyalty to the enterprise stems from impartiality.

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