

An Evaluation of Quality of Work Life Practices and Effectiveness in Software Industry of Delhi NCR

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Abstract

The ever varying speed of change of the economic condition and social demands has resulted into a change in the role and nature of 'work'. People spend most of their time at work therefore it should become a source of personal satisfaction. Quality of work life is an important issue especially in the software industry which is characterized with high workload. The paper is based on a research done on the software companies and its employees with an aim of getting insight into the current work life policies and practices as well as the effectiveness of these practices on the organization. Data was collected through questionnaire from a sample of 362 employees representing ten software companies in Delhi and national capital region. The collected data after being coded was analyzed using Statistical Package for Social Sciences Research (SPSS) and various statistical tests were applied based on the hypotheses and matching variables. It is assumed and tested in the study that a better Quality of work life improves the growth of the employees along with the organizational growth leading to a win-win situation. The most important predictor of QWL was found to be job satisfaction. The results suggest that there is a positive significant association between quality of work life practices and organizational effectiveness.

Keywords: Job Satisfaction, Quality of Work Life (QWL), Software Professionals, Work Life Balance

Introduction

The aim of QWL is to create a work space that enhances employee well being and satisfaction. The term 'QUALITY OF WORK LIFE' refers to the favorableness or non-favorableness of a total job environment for the employees. It can be any conscious effort for improving the working conditions and has a strong focus on providing a work environment conducive to satisfy individual needs. It mainly includes aspects of work-

related life such as wages and working hours, work environment, benefits and services, career prospects and human relations, which are related to worker satisfaction and motivation. In fact the notion of QWL is closely related to the quality of life concept.

Implied in the idea of QWL is the notion that to be a good employer, a business or institution must recognize that employees have lives before and after work (and, for that matter, during work as well). That recognition, in turn, creates trust and loyalty among employees, everybody benefits, and the world is a better place to live and work in. Gathering data on how employees view the organization can help chart a direction for addressing a range of human resource challenges.

The Indian software industry has been a remarkable success story, has grown 30 percent annually for 20 years, with 2008 exports projected at close to \$60 billion. As the contribution of service industry is becoming increasingly important to the economies of developing nations, managers of service organization affirm to the fact that their employees are the most valuable asset. And to retain these valuable resources it becomes evident to apply QWL measures and programs and keep the employees satisfied. Yet, despite such importance of QWL for the employees in the service sector, there is limited research, which elucidates the employees' expectations of the QWL elements in service sector. Therefore, this study attempts to analyze the quality of work life of software professionals of Indian IT industry. It investigates the link between QWL practice and organizational effectiveness in terms of employee commitment, improvement in organizational climate etc. within the software company located in Delhi NCR. Thus, the objectives of this study are:

- To identify the overall levels of QWL prevailing in a set of software companies located in Delhi NCR.
- To find out the most significant predictor of QWL in the set of software companies studied.
- To study how QWL practices is related and influences the organizational effectiveness.

Review of Literature

QWL is a broader concept; its evolution began in the United States, in 1970s, when the humanization of work was focused through quality of the relationship between worker and the work environment. Since then it has

been identified and defined by many researchers in a variety of ways; however no comprehensive attempt has been made in Indian Software Organizations to develop a theoretical frame for the practice and assessment of this very concept.

According to American Society of Training and Development, "It is a process of work organizations which enables its members at all levels to participate actively and efficiently in shaping the organization environment method and outcomes. It is a value based process aimed towards meeting twin objectives".

QWL is a philosophy, a set of principles, which holds that people are the most important resource in the organization as they are trustworthy, responsible and capable of making valuable contribution and they should be treated with dignity and respect. Authors and researchers have proposed models of QWL which includes a wide range of factors. Some of the selected definitions are given below:

Walton (1973) has performed an imperative role in laying the foundation of the concept of QWL. According to Walton (1973), the QWL is getting importance as a way to rescue human and environmental values that have been neglected in favor of technological advancement of the productivity and economic growth.

Mirvis and Lawler (1984) suggested that Quality of working life was associated with satisfaction with wages, hours and working conditions, describing the "basic elements of a good quality of work life" as; safe work environment, equitable wages, equal employment opportunities and opportunities for advancement.

Baba and Jamal (1991) listed what they described as typical indicators of quality of working life, including: job satisfaction, job involvement, work role ambiguity, work role conflict, work role overload, job stress, organizational commitment and turn-over intentions. Baba and Jamal also explored reutilization of job content, suggesting that this facet should be investigated as part of the concept of quality of working life

QWL is not a unitary concept, but has been seen as incorporating a hierarchy of perspectives that not only include work-based factors such as job satisfaction, satisfaction with pay and relationships with work colleagues, but also factors that broadly reflect life satisfaction and general feelings of well-being (Danna and Griffin, 1999).

Tablet
List of Factors of QWL indentified by past researchers

Study	Factor& Identified
Walton (1974)	Safe and healthy work conditions, opportunity to use abilities, future growth opportunity, constitutionalism, work relevance to society, adequate and compensation social integration
Hackman and Oldham(1976)	Skill variety, Task Identity, Task significance
Taylor (1979)	Autonomy and Feedback, individual power, employee participation in the management, fairness and equity, social support, use of one's present skills, self development, a meaningful future at work, social relevance of the work or product, effect on extra work activities
Warr and colleagues (1979)	work involvement, intrinsic job motivation, higher order need strength, perceived intrinsic job characteristics, job satisfaction, life satisfaction, happiness, and self-rated anxiety
Cooper (1979)	Democracy, security equity, and Individuation
Kahn (1981)	task content; supervision Resources; promotion; work conditions; organizational context autonomy and control; relations with co-workers; wages
Mirvis and Lawler (1984)	safe work environment, equitable wages, equal employment opportunities and opportunities for advancement
Kalra and Ghosh (1984)	safe and healthy working conditions; physical environment; absence undue work stress employee welfare; job security
Baba and Jamal (1991)	Job satisfaction, job involvement, work role ambiguity, work role conflict, work role overload, job stress, organizational commitment and turn-over intentions
Sirgy (2001)	need satisfaction based on job requirements, need satisfaction based on work environment, need satisfaction based on supervisory behavior, need satisfaction based on ancillary programmes, organizational commitment

Table 1 gives the summary of different factors identified by various researchers in the field of QWL. This review on the definitions of QWL indicates that QWL is a multi-dimensional construct, made up of a number of interrelated factors that need careful consideration to conceptualize and measure.

The concept of QWL was reviewed by Tanmoy Datta (1999) from the approach of human value. His important findings which can be used to judge whether the QWL is improving or deteriorating, is the nature of relationship between organization and employees: QWL improves when

more and more relationship move towards transcendental heights. The texture of organizational sub-coalitions: more the number and size of sub-coalitions increase, QWL deteriorate and vice-versa, Images of the organization, the nature of non-conformist, the nature of conflicts, etc. all these do depict the level of QWL in any organization.

V. Manickavasagam and S. Sumathi (2000) found out in their study that job is considered to be satisfying when there is a match between the characteristics of job and the needs of the individual. There are many factors that affect this attitude of the employee that is job security, pay, working conditions, work itself, development, organization etc. All the above points were judged by the study using a Survey schedule having different scales. An interesting finding is that executives have high job satisfaction than the staff and workers, also it was found more among factory workers than Mine workers

In the view point of Wagner C. (2001), an employee's perceived QWL is determined primarily by two factors, both of which are controllable by their immediate supervisor: First, the main QWL factor is feeling appreciated for performing meaningful work. To put this in perspective, the U.S. Department of Labor reports the number one reason employees quit a job is because they don't feel appreciated. Second, Employees also want to feel like 'their work matters'.

The term "Quality" at work was also addressed by Daniel J. Steininger, (1994) in their respective studies where the focus was to find out the new requirements of work environment for high quality services and new service development. The work done on QWL in Canada is in Health Care Organization where in Donald C. Cole, Lynda S. Robson, Louise Lemieux-Charles, Wendy McGuire, Oaude Sicotte and Francois Champagne (2005) examine the presence and use of QWL indicators in Canadian HCOs through their study. The data was collected from six public HCOs through various surveys and focus Interview techniques. The result shows that the HCOs do have basic understanding of the concept of QWL, yet not implemented the QWL program as such.

Kalra and Ghosh (1984), Kahn (1981) and Seashore (1975) stated that a significant by-product of the approach to the quality of work life discussed has been the identification of those aspects of jobs and work environments that impact most strongly upon the job satisfaction, job performance, and life-long well being of those who are so employed.

Ellis and Pompli (2002) identified a number of factors contributing to job dissatisfaction and quality of working life in nurses, including: poor working environments, resident aggression., workload, unable to deliver quality of care preferred, balance of work and family, shift work, lack of involvement in decision making, professional isolation., lack of recognition, poor relationships with supervisor/peers, role conflict, lack of opportunity to learn new skills.

The definition by Serey (2006) on QWL is quite conclusive and best meets the contemporary work environment. The definition is related to meaningful and satisfying work. It includes, (a) an opportunity to exercise one's talents and capacities, to face challenges and situations that require independent initiative and self-direction; (b) an activity thought to be worthwhile by the individuals involved; (c) an activity in which one understands the role the individual plays in the achievement of some overall goals; and (d) a sense of taking pride in what one is doing and in doing it well.

Ballou, Brain; Godwin, Norman H. (2007), emphasized on the novel relationship between QWL investment and the financial performance. There are 3 major findings of the paper, first being the interrogation of the issues that why any company should spend to increase employee satisfaction. Second finding relates to the Improving the work life quality, a list having common benefits is given that includes benefits like child-care resource, career counseling, elder care etc. Third finding is the Investment in the future, as complexity in the economy of America is increasing; this investment in employee satisfaction becomes all the more important.

Research Methodology

The research issues addressed in the paper are threefold; (1) Identification of the Quality of work life prevailing in a set of software companies located in Delhi NCR, (2) finding out the most significant predictor of QWL and (3) To analyze the organizational effectiveness of QWL practices and measures. The research involved an extensive literature review in the area of concern.

To reach the objectives of the study, a combination of various methods of survey like; questionnaire, Interview and observation were followed. A large questionnaire survey in ten telecom companies was carried and 500 questionnaires were sent, 362 usable questionnaires were received, representing a response rate of approximately 70 percent. The questions for

the survey were drawn from existing literature. It used five-point Likert Scale, each item in the variable was measured from a range of 1- representing strongly disagree to 5- representing strongly agree. The set of questionnaire consists of three sections. Section A consists of personal background or demographic questions which are employee's general information such as gender, age, marital status, length of services, educational background and others. Section B comprises of a set of objective indicators which reflects prevailing working condition and management policies and practices at the work place. It consists of various statements to assess the prevailing QWL practices in a particular company. Section C, also comprises of a set of objective indicators, a selected measures of effectiveness that depicts the effectiveness of the prevailing working condition and management policies and practices at the work place. The scores assigned by the employees for the above questionnaire were consolidated into 3 categories or levels namely 'High', 'Medium' and 'Low'. The researchers used probability sampling techniques in which every member of the population was known. The Statistical Package for Social Science (SPSS) version 17.0 for windows was used in organizing and analyzing the data. After reviewing the literature, following seven dimensions of QWL were identified as : job satisfaction, working conditions, opportunity for growth, work life balance, stress management, social relationship and organizational culture and communication.

To gain perspectives into the socio-demographic characteristics of respondents, frequency distribution of the responses is calculated and other descriptive statistics is employed to assess the levels of quality of work life and organizational effectiveness. Cronbach's alpha coefficient was also obtained to indicate how well the items in a set are positively correlated to one another. Finally, the data was tested and analyzed using the Correlation and Regression Analysis with hypothesis testing.

Research Hypothesis

H1: There exists a satisfactory level of overall QWL in the companies studied (in the framework of researched area).

H2: There is a significant relationship between satisfaction with each dimension of work life and Overall Quality of Work Life

H3: There is a significant and positive relationship between the level of QWL practice and level of effectiveness in the Software companies. (High level of QWL results in high level of effectiveness).

Results and Discussion

The study has used qualitative as well as quantitative data from primary and secondary sources. The primary data has been collected on the basis of survey conducted among employees of software companies. The predictors of QWL were identified through the multiple regression analysis. The percentage analysis and chi-square test were performed on different demographic variables and levels of QWL. The findings would help the organizations to focus resources and energy on those aspects that made a significant difference in the work life.

An analysis of demographic features of sample suggest that there are about 35 percent of respondents are female and 65 percent are men. The average age is 30 years but men being older than women. 68 percent of employees have a nuclear family and 32 percent are still living in a joint family. Maximum number of employee that is 57 percent employees are from a service class family. The age of 90 percent of the workforce is less than 40 years which represents a young employee force in this Industry. The analysis of findings is summarized in following three points as answers to objectives of the study.

The assessment of QWL Prevailing in the Set of Companies

As QWL is considered one of the prerequisites of the working environment, therefore we assume that there is a minimum level of QWL in the organizations. This minimum level is assumed to be average score of 3 (that is 60 percent) out of the maximum score of 5 for any company or any variable is considered as satisfactory. Thus, the findings suggest that different the levels of QWL prevail in each company representing the software Industry.

Table 2
QWL Levels in the Software Industry

QWL	Frequency	Percentage	Cumulative percent
High	224	61.9	61.9
Low	131	36.2	98.1
Medium	7	1.9	100.0
Total	362	100.0	100.0

Table 2 presents a consolidated picture of various levels of QWL categorized into high, medium and low. The total score of respondents reflect that 224 (62 percent) employee out of 362 employees perceive the

work life quality as 'high' in their organizations whereas 31(36.2 percent) employees responded to a low QWL in their respective companies. Only 7 (2 percent) employees perceive a medium level of QWL. The average score of QWL taken as a whole for industry is calculated to be 3.4 out of 5. There exists a major gap between the expected and the existing QWL: the present level of QWL is calculated to be 62 percent whereas the expected level of QWL is assumed to be high (80 to 100 percent).

The findings suggest that the Quality of work life was found to be satisfactory in only five companies out of ten software companies studied and the mean score of other five companies is calculated to be less than the assumed minimum level of 3. Thus the software companies have different levels of QWL based on the size and growth of the companies. An interesting finding shows that the companies where the QWL levels are found to be high, they are large sized companies and they follow global standards and benchmarks of QWL.

Best Predictors of Quality of Work Life

To find out the predictors of QWL, a stepwise regression method was applied, investigating whether the constructed model is significant or not. Based on this method, seven predictor variables were found to explain QWL. These predictor variables are job satisfaction, working conditions, opportunity for growth, work life balance, stress management, social relationship and organizational culture and communication. Regression analysis is one of the important analyses of research as it informs what percent of the QWL level can be explained by each of the seven dimensions used. The results of multiple regression analysis are presented in Table 3A and B.

Multiple Regressions

Dependent variable: QWL

Independent Variables:

Job satisfaction (JS)

Working Conditions (Wq)

Growth opportunity (GO)

Work life balance (WLB)

Stress Management (SM)

Social Relationship (SR)

Organizational culture and communication (OCq)
 R-squared= .960
 R-squared (adjusted for d.f.)= .959
 Standard error of estimates= .117

Table 3 A
 Results of Multiple Regression Analysis (QWL)

Coefficients					
Model	Un standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.170	.034		4.993	.000
Job Satisfaction	.236	.015	.282	15.722	.000
Working Condition	.113	.012	.153	9.270	.000
Growth Opportunity	.142	.012	.193	12.183	.000
Work Life Balance	.088	.009	.124	9.682	.000
Stress Management	.041	.007	.077	5.958	.000
Social Relations	.125	.015	.145	8.362	.000
Organizational Culture & Communication	.194	.014	.239	14.146	.000

Table 3 B
 ANOVA Table (QWL)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	14.997	7	16.428	1199.663	.000
Residual	4.848	354	.014		
Total	19.845	361			

The results illustrate that a strong relationship exists between all the seven dimensions and the QWL. The R-squared of 0.96 implies that the seven predictor variables explain about 96 percent of the variance in QWL. This is a very respectable and strong result with high values. The t-values are significant, all being more than 1. The ANOVA Table revealed that the F-statistics (1199.663) is very large and the corresponding p-value is highly significant (0.000) also lower than the alpha value of 0.05. This indicates that the slope of the estimated linear regression model line is not equal to zero confirming that there is linear relationship between QWL and the predictor variables.

The coefficient table makes clear that all the variables are significant predictors of QWL at levels of .01, but the variables with the highest beta values to be of significant in explaining QWL are: job satisfaction, working

conditions, growth opportunity and organization culture and communication. Job satisfaction was found to be highly significant predictor of QWL, it explained 28.2 percent of total variance. Organizational culture and communication has a positive and significant relationship with QWL at the level of .01 that explained 23.9 percent of total variance. Opportunity for growth also has a positive and significant relationship with QWL explained 19.3 percent of total variance. Similarly working conditions explained about 15.3 percent of total variance. These four variables account for 86.7 percent of total variance significant at .01 levels. Result further revealed that all the seven variables are significantly related to QWL. Hence, the hypothesis 2, which states that there is a significant relationship between each variable or dimension and Overall QWL, is accepted. Thus the best predictors of QWL in software companies were found to be job satisfaction, growth opportunities and organizational culture.

QWL and Effectiveness in Organizations

It is hypothesized that high level of QWL results in high level of organization effectiveness. (There is a positive relationship between the level of QWL and level of effectiveness in the set of software companies). To analyze the relationship between prevailing levels of QWL and organizational effectiveness, correlation and regressions analysis were applied. The results of coefficient of correlation between QWL and Effectiveness were found to be (+.812) significant at .01 levels. The value is highly significant and positive, depicting a direct and significant relationship between QWL and organizational effectiveness. It suggests that high level of QWL results into high level of effectiveness and low levels of QWL may affect the effectiveness of organization in an adverse manner. The regression analysis result of QWL and effectiveness is presented in Table 4 below:

Table 4
Results of Regression Testing the Relationship Between QWL and Effectiveness

Independent variable	R	R square	R square characte percent	'F' values	Std beta	't' value
QWL	.812	.659	65.8 percent	696.455	.812	6.329

Dependent variable: organizational effectiveness

Independent variable: overall QWL

R-squared= .659

Standard error of estimates= .347

Significant at 99 percent

The regression analysis depicts the R-square adjusted value to be .659, having significant value of 't'. Thus, the model composing variables of QWL can explain about 65.9 percentage of the total variation in Effectiveness. The result is statistically significant at the level of .01. Hence, the hypothesis that there is a positive relationship between the QWL and organizational effectiveness in the Industry is accepted and validated. The influence of QWL on the Organizational effectiveness is assessed through five variables: employee commitment, perceived job security, stress levels, career advancement and improvement in organizational climate.

The scale reliability is checked and the cronbach's alpha score is calculated to be 0.860. The mean scores of each item was also calculated and it was found that the highest mean value is for the item 'feeling of pride and accomplishment in the job', depicting that most of the employees feel pride and sense of accomplishment in the work they do whereas the least mean value are for job security and employee commitment. The companies where the programs for improving the quality of work life were organized and implemented, it had a great impact on the overall effectiveness of the organization. A happy and healthy employee will give better turnover, make good decisions and positively contribute to the organizational goal. An assured good quality of work life will not only attract young and new talent but also retain the existing experienced talent.

Conclusion

The study highlights the quality of work life of software employees under various dimensions. The findings clearly suggest that the increase in the practice of Quality of work life may increase the organizational effectiveness. The research study would certainly enhance knowledge on the contextual environments of IT professionals that lead to QWL. By knowing the predictors of QWL and organizational effectiveness, organizations would identify ways and means to improve the approach in minimizing the adverse impact of changes in work environments

pertaining to QWL. It is especially important to point again to the fact that a high quality of working life is the one of the most important factor to reach the goals of achieving organizational effectiveness. Improvement in QWL is a source of numerous gains. It might lead to improve positive feelings towards one's self (greater self-esteem), towards one's job (improved job satisfaction and involvement), and towards the organization (strong organizational commitment). It also results in building up of physically and psychologically healthier, productive, adaptable and motivated employees.

The findings would help the software companies to review the level of prevailing QWL and to enhance the same by the educational administrators. A good human resource practice would encourage IT professionals to be more productive while enjoying their work. Indian employees are ambitious and look for improvements in the ways organization works and being young they are more receptive to change. Effective strategic human resource policies and procedures are essential to govern and provide excellent QWL among IT professionals. Conversely, poor human resource strategic measures that are unable to address these issues can effectively distort the QWL, which will eventually fail the organizations' vision.

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