TQM PRACTICES: CONTINUOUS IMPROVEMENT AND PROBLEM PREVENTION

Noorliza Karia

School of Management, Universiti Sains Malaysia, Penang, Malaysia noorliza@usm.my

Muhammad Hasmi Abu Hassan Asaari

School of Distance Education, Universiti Sains Malaysia, Penang, Malaysia hasmi@usm.my

ABSTRACT

This study focus on the impact of continuous improvement and problem prevention on workers of public and private organizations that have implemented TQM practices. The results of the study show that organizations that implement some degree of continuous improvement and problem prevention, their employees experience some positive impact on job satisfaction and organizational commitment. On the other hand, continuous improvement and problem prevention lack of significant relationship with job involvement and career satisfaction. Thus, top management should pay more attention to continuous improvement and problem prevention, and constantly look ahead on how can they correct and prevent problems and make improvements.

INTRODUCTION

Organizations should be well informed the benefits of TQM practices. In other words, encouraging TQM practices produce beneficial effect on people. When fully implemented, TQM brings good benefits to organization in term of quality, productivity, and employee development (Lawler et al., 1995). People are most important resources in dedicating their effort of achieving the high level of quality product and service. Moreover, many of the basic elements of TQM deal with people such as team work, creativity, innovation, extensive training, high level of communication, employee and management trust, and quicker decision making. Without their honest self-scrutiny and purposeful analysis, and without their commitment toward common goals, the organization may fail to achieve its objectives.

In fact, most of the successful TQM implementations depend heavily on changes in employees' attitudes and activities. The employees who will be affected most directly are the agents of change in organization that are involved in implementing TQM or other programs for continuous improvement. But what is the impact of these changes on the employees and does TQM provide benefit for the employees. The influence of TQM processes will produce positive impact on employees, improve level of satisfaction and commitment, and organizational effectiveness. Consequently, TQM must focus not just on the quality of product but also on the quality of its employees to remain an effective management approach.

Many organizations that adopted quality management practices have experience an overall improvement in organization performance such as attitude, commitment, and effectiveness.

Butler (1996) found that companies that use TQM practices achieved better employee relationship (i.e. employee satisfaction, attendance, turnover, safety, and health). Therefore Malaysian companies, private and public, should be committed in the TQM practices and should move towards implementing it successfully.

This study examines the impact of continuous improvement and problem prevention practices on employee's work related attitude. Specifically, the study examines the degree of employee's job involvement, job satisfaction, career satisfaction, and organizational commitment as a result of the level of continuous improvement and problem prevention practices.

LITERATURE REVIEW

The literatures on TQM practices indicate its definition as formal, programmatic, and behavioral (Zeitz et al., 1997). Further, Ross (1993) defined TQM as set of practices such as continuous improvement, meeting customers' requirement, reducing rework, long-range thinking, increased employee involvement and team work, process redesign, competitive benchmarking, team-based problem-solving, constant measurement of results, and closer suppliers' relationship.

Clinton (1994) summarized the TQM principles made by forefathers in quality movement, Deming, Juran, Crosby, and Feigenbaum, into 5 basic principles namely: focus on customers' needs, focus on problem prevention, make continuous improvements, train employees to improve quality, and apply the team approach to problem solving.

Further, Idris et al., (1996) discovered that most important practices, which have been implemented were problem solving techniques, production planning and control, statistical sampling, quality awareness program and house keeping. Similarly, Oslan (1997) found that the most commonly used TQM practices were problem-solving team followed by training for large numbers of employees. Powell (1995) also described TQM as an organization wide approach that focuses on continuous improvement through the participation of every individual in the organization.

Bound (1995) indicated that continuous improvement as a program to reduce order processing times, service development cycle-time, service delivery cycle times as well as reducing paper work and to find wasted time and cost in all internal processes. Further Bounds (1995) stressed that TQM teach managers to engage in root cause analysis. Manager must address the cause of the problem within the system to eliminate both the problem and its symptoms. Focusing on the problem prevention creates a positive working environment for people which asking why rather than asking whom.

Job involvement is related to task characteristics. Employee who has a greater variety of tasks and who deals with people at work will feel more involved in the job (Guimareas, 1996; Luthans, 1995, Kanungo, 1982). Mohrman et al. (1996) indicated that TQM practice is an important part of a successfully involving employee in processes that lead to improvement of company performance. Therefore, the use of TQM practices creates a culture that encourages employee to be more jobs involved and to work together company wide.

Job satisfaction refers to an affective reaction of individuals to specific aspects of their job or positive emotional status. It refers to employees' contribution and recognition towards achievement of organizational goals (Guimareas, 1996; Weiss, 1967). Therefore, focusing on TQM practices will lead to improvement in employee job satisfaction.

Career satisfaction refers to the overall reaction of individuals to their career (Greenhaus et al., 1990). TQM practices also lead to a particular environment and set of managerial action that give direction to employee motivation and the successful accomplishment of goals. They help satisfied employees to be motivated to proceed towards achieving their career and goals, utilizing their skills and abilities, and improving their quality of work.

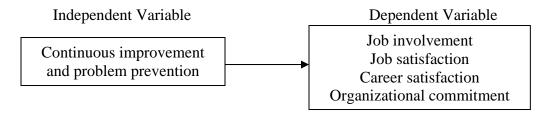
Finally, organizational commitment refers to the affective reaction of individual to the whole organization and the degree of attachment and loyalty towards the organization (Guimareas, 1996; Luthans, 1995; Mowday et al., 1979). TQM practices can retain employees and gain their loyalty. The successful implementation of TQM will make sure that employees are more likely to be motivated to perform and likely to stay with the organization.

METHODOLOGY

The independent variables in this study focus on the TQM practices that contributed to improved performance. It includes all the criteria used in the guidelines of the Malcolm Baldrige National Quality Award (MNQBA). The same criteria are used in the companies who are recipients of the Industry Excellence Award (Quality Management Excellence Award – QMEA Category) of the Ministry of International Trade and Industry and the Prime Minister's Quality Award (PMQA) for private sector category in Malaysia. The criteria are: policy on quality management, QCC, training, quality audit, other quality improvement programs, top leadership involvement, management data and information, human resource management, customer satisfaction, handling customers complaints to increase productivity, support services and vendor programs, and quality and operational results.

Dependent variables in this study focus on the work related attitude. The indicators of work related attitudes are job involvement, job satisfaction, career satisfaction, and organizational commitment. Job involvement describes an employee's ego involvement with job or psychological identification with job. It refers to the overall affective reaction of individuals to their involvement in job, participation in decision-making, and commitment in quality improvement. Job satisfaction refers to affective reaction of individuals to specific aspects of their job or positive emotional status; refers to employees' contribution and recognition towards achievement of organization's goals. Meanwhile, career satisfaction refers to the overall affective reaction of individual to their career; specifically refers to the motivated employees to proceed towards achieving their career and goals, utilizing their skills and ability and improving their quality of work. Finally organizational commitment refers to the affective reaction of individuals to the whole organization and the degree of attachment or loyalty that employees feel towards the organization.

The aim is to demonstrate the practices and to facilitate the development index for TQM practices. To provide a general framework for examining the impact of continuous improvement and problem prevention on work related attitude, a model is depicted as below.



Based on the theoretical framework as above, 4 hypotheses were tested:

H₁ : Continuous improvement and problem prevention practices lead to positive impact on job involvement.

H₂: Continuous improvement and problem prevention practices lead to positive impact on job satisfaction.

H₃ : Continuous improvement and problem prevention practices lead to positive impact on career satisfaction.

H₄: Continuous improvement and problem prevention practices lead to positive impact on organizational commitment.

The questionnaire of continuous improvement and problem prevention was adapted from Powell (1995). The job involvement, job satisfaction, career satisfaction, and organizational commitment were adapted fro Kanungo (1992), Weiss et al. (1967), Greenhaus et al. (1990), and Mowday et al. (1979) respectively. A total of 200 individual employees from different sector of organizations in Penang that practice TQM were selected for the study. They were required to complete mail questionnaires. Only 104 questionnaires were completed and returned. Correlation studies were used to determine the relationship between dependent and independent variables. Further, continuous improvement and problem prevention were regressed against job involvement, job satisfaction, career satisfaction, and organizational commitment.

SAMPLE PROFILE

The profile of the respondents can be distinctively describe as there are almost equal number of male and female employees. Majority of the employees is married (71.2%). Almost 67% are high school/diploma holders, and 33% are degree/post graduate holders. Respondent's job level in managerial are 63%. Majority of the respondents are in the administration department, almost 67%. There are equal numbers of completed questionnaire received from private and public respondents. Table 1 indicates the organization's background of the respondents.

Table 1: Organization Background

Item	Category	N	%
Organization Status	Private	52	50.0
	Public	52	50.0
Organization Type for	Overseas MNC	34	65.4

Private	Malaysian MNC	17	32.7
	SME	1	1.9
ISO9000 Status	Yes	44	43.1
	No	58	56.9
No Years of Practice	Less than 3 years	21	41.2
TQM	3-5 years	16	31.4
	3-5 years 6-9 years	12	23.5
	More than 10 years	2	3.9

RESULTS

Based on Pearson correlation coefficient between continuous improvement and problem prevention with job involvement, job satisfaction, customer satisfaction, and organization commitment are tabulated in Table 2. This can be seen that continuous involvement and problem prevention is significantly positive correlated to job involvement, job satisfaction, customer satisfaction, and organization commitment.

Table 2: Pearson Correlation Coefficient

	Continuous improvement and
Item	problem prevention
Job Involvement	0.2121
	p=0.031
Job Satisfaction	0.293
	p=0.0002
Career Satisfaction	0.2234
	p=0.023
Organizational Commitment	0.2954
	p=0.0002

(df=97, p<0.1, r=0.2540)

Therefore the accepted hypotheses are as follows:

H₂ : Continuous improvement and problem prevention practices lead to positive impact on job satisfaction.

H₄: Continuous improvement and problem prevention practices lead to positive impact on organizational commitment.

DISCUSSION AND CONCLUSION

The study sets out to examine to what extent that continuous improvement and problem prevention practices have an impact on the employee's work related attitude. Further, this study intended to examine the contribution of continuous improvement and problem prevention practices toward job involvement, job satisfaction, career satisfaction, and organizational commitment.

Based on the result of correlation analysis, continuous improvement and problem prevention practices are significantly positive correlated to job involvement, job satisfaction, career satisfaction, and organizational commitment. Therefore, job involvement, job satisfaction, career satisfaction, and organizational commitment increase as continuous improvement and problem prevention practices increase. It is recommended that top management to review the organization's overall goals to be in line with TQM. Further, human resource department should review, improve, and understand the factors related to motivation, training, and retention of good employees. They should be influencing the work practices of individual employees. Meanwhile, union and employees must support TQM concept.

Continuous improvement and problem prevention lead to positive impact on job satisfaction and organizational commitment. Even though these practices could be indirectly contributed to job satisfaction and organizational commitment, they are still important practices in implementing TQM as based on Pearson correlation. Further, they are significantly correlated to job satisfaction and organizational commitment.

The lack of significant relationship between these practices and job involvement and career satisfaction suggests that management failed to prove its commitment into these important practices. Thus, an important recommendation is that top management must pay more attention to continuous improvement and problem prevention practices specifically continuous improvement and problem prevention, and constantly looks up how they can correct and prevent problems, and make improvements.

Finally, since continuous improvement and problem prevention create a culture that encourages employees to gain job satisfaction and organizational commitment, they should be placed completely in the hands of top management in ensuring the success of the continuous improvement and problem prevention practices. Management should understand that the process is to be long lasting and meaningful.

REFERENCES

- Bounds, G.M. (1995). *Management: A Total Quality Perspective*, South Western College Publishing, Cincinnati, Ohio.
- Butler, D. (1996). "A Comprehensive Survey on How Companies Improve Performance Through Quality Efforts," *David Butler Associates*, Inc., California.
- Clinton, R.J. (1994). "Implementing Total Quality Management: The Role of Human Resource Management," S.A.M. Advance Management Journal, Spring, Vol.59, Issue 2.
- Greenhaus, J.H., Parasuraman, S., and Wormley, W.M. (1990). "Race Effects on Organizational Experience, Job Performance Evaluations, and Career Outcomes," *Academy of Management Journal*, March, Vol.33, Issue 1, p.64-96.
- Guimareas, T. (1996). "TQM's Impact on Employee Attitude," *The TQM Magazine*, Vol.8, No.1, p.20-25.

- Idris, M.A. and S. Idris (1996). "The Adoption of ISO9000 and Total Quality Management among Malaysian Manufacturing Industries," *SMI Department Section*, SIRIM, Malaysia.
- Kanungo, R. (1982). "Measurement of Job and Work Involvement," *Journal of Applied Psychology*, June, Vol.67, Issue 3, p.341-349.
- Lawler III, E.E., Mohrman, S.A., and Ledford, G.E. Jr. (1995). *Creating High Performance Organization*, Jossey-Bass, San Francisco, California.
- Luthans, F. (1995). Organizational Behavior, 7ed, McGraw-Hill, Inc., New York.
- Mohrman, S.A. and Lawler III, E.E. (1996). "Do Employee Involvement and TQM Programs Work?" *Journal for Quality and Participation*, Vol.19, Issue 1, p.6.
- Mowday, R.T., Steers, R.M., and Porter, L.W. (1979). "The Measure of Organizational Commitment," *Journal of Vocational Behavior*, Vol.22, Issue 8, p.90-96.
- Oslan, O. (1997). "Impact of Total Quality Attitude Management and Training and Work Content on Attitude Supervisor," *International Journal of Organization Analysis*, July, Vol.5, Issue 3, p.291-301.
- Powell, T.C. (1995). "Total Quality Management as Comparative: A Review and Empirical Study," *Strategic Management Journal*, Vol.16, p.15-37.
- Ross, J. (1993). *Total Quality Management: Text, Cases, and Readings*. St. Lucie Press, Delray Beach, Florida.
- Weiss, D.J., Darwis, R.V., England, G.W., and Lofquist, L.H. (1967). *Manual for the Minnesota Satisfaction Questionnaire*, Minnesota Studies in Vocational Rehabilitation, Industrial Relation Center, University of Minnesota, Minneapolis.
- Zeitz, G., Johannesson, R, and Ritchie, E. Jr. (1997). "An Employee Survey Measuring Total Quality Management Practices and Culture: Development and Validation," *Group and Organization Management*, Thousand Oaks, Vol.22, Issue 4.