NCD - 5561

# **Participative Problem Solving Towards Continuous Improvement:**

A Case Study of Motorola (M) Sdn. Bhd.

#### BY

## FURAIDAH MOHAMED YUSOF

Bachelor of Science Degree in Electrical Engineering
University of Illinois at Chicago
1988

Submitted to the Faculty of
Business and Accountancy
University of Malaya
in partial fulfillment of
the requirements for
the Degree of

MASTER OF BUSINESS ADMINISTRATION

March, 1997

Perpustakaan Universiti Malaya

#### ABSTRACT

In the 1980s when the QCC concept was first introduced in the local organizations, many considered it as a management fad. Today, however the success from those that have implemented the concept have convinced, others in the private and public sectors to adapt it too.

This research examines the adaptation of the QCC concepts to the current organizational scenario. A case study which involved a manufacturing company, Motorola (M) Sdn. Bhd. was conducted to examine the various aspects of participative problem solving and its contribution towards continuous improvement. Each element of the QCC was investigated in terms of how it had been used differently in the 1990's especially in the framework of Total Quality Management.

A survey is utilized to gain insights on the PPS activities from the organization. Interviews with some key personnel to evaluate the benefits and the implications of the PPS activities to the overall performance of the organization, as well as feedback from the experiences from the team members were obtained.

The survey results seemed to suggest that the basic concepts of QCC are applicable in organizations of the 1990's and beyond. However, some adaptation would be required to meet the demands of the current organizational scenario. The increased level of empowerment, mobilization of people at all levels and the trend to cross departmental boundaries are some of the new features of the team environment that must be considered in this era. Results from the survey showed that the Participative Problem Solving teams at Motorola (M) Sdn. Bhd. look forward to solving more complex problems, in line with the continuous improvement concept of the TQM framework.

The effectiveness of the PPS programs in meeting the organization's tangible and intangible objectives was affirmative. The benefits that the employees and management received tend to indicate that the PPS activities should be adopted company wide. However for optimum results some improvements were recommended so that it will bring more benefits to Motorola in the future.

The findings of this study, would also benefit other organizations in the manufacturing industry which may be interested in organizing similar teams.

### **ACKNOWLEDGMENT**

There are several people I would like to thank for giving me their support, encouragement, and constructive criticism, without whom this research would not have been possible.

Firstly, I would like to express a very special thanks to my supervisor, Puan Angeline Teo, who has dedicated her time in guiding me through the research process until the successful completion of the study.

My thanks goes to the Employee Development Department of Motorola namely, Encik Kamarul Ariffin and Miss Irene Wong who have helped me in obtaining the relevant information needed for the research.

A special word of thanks to the management of Motorola (M) Sdn. Bhd. for allowing me to pursue this research.

To all the participants of the survey and interviews, without whom, this study is impossible, I sincerely thank you.

My foremost gratitude goes to a very special person, Edward Chua, for his constant motivation and encouragement throughout my MBA course.

Last but not least, my sincere appreciation goes to my loving family for their relentless support, encouragement and strength to pursue all my hopes and dream.

# **Table of Contents**

Chapter	Page
I. Introduction	
Background	1
Scope of Study	······································
Study Objective	5
Significance of Study	5
Research Design & Methodology	6
Organization of the Report	8
II. Literature Reviews	
History of Quality Control Circle	(CC)10
Philosophy and Principles of OCC.	13
• •	
III. QCC Within a TQM Frame	
QCC as Continuous Improvement T	Tool
QCC and Employee Involvement	
QCC in the 1990's and Beyond	30
IV. Motorola (M) Sdn. Bhd.	
Background	31
History of Participative Problem Sa	ving (PPS)32
PPS Organization and Activities	33
Problem Solving Stages	37
-	
V. Analysis of Result	
	40
An Overview of PPS Attributes	42
VI. Summary and Conclusion	
	58
Summary of Research Results	59
Team Formation	59
Level of Participation	60
Difficulties Faced by the Team	61
Management Support	61
Pernetuating PPS Efforts	63
	63
Implications of the Study	64
Limitations of the Study	67
Recommendations for Future Research	ein
Diblio graphy	
ымподсярпу	69
Appendices	
	English)
Appendix B:Survey Questionnaire	Bahasa Malaysia)

## List of Tables

Table	Page
1. General Characteristics of Respondents	41
2. Role of Respondents in PPS	42
3. Reasons for Participation in PPS	42
4. Team Characteristics	43
5. Departments Represented by Members	44
6. Types of Problems Solved By Teams	44
7. How Was Team Formed?	45
8. Characteristics of Meetings Held by PPS Teams	45
9. When Do Teams Hold Their Meetings?	46
10. Members' Attendance Level	46
11. Reasons for Low Attendance	47
12. Training Attended by Members	47
13. Problem Solving Tools Used By PPS Teams	48
14. Problems Encountered By Teams	48
15. Opinion On the PPS Guidebook	49
16. Level of Participation	50
17. Management Attendance in Team's Meetings	50
18. Participation In Internal and External Presentations	51

	19. Perception of Respondents on Management Support	
	20. Who Do Teams Refer to for Help	52
	21. Level of Empowerment Given.	53
	22. Types of Decision Empowered to Teams	53
	23. Perception on Rewards	54
	24. Perceptions on Evaluation Criteria of PPS Teams	54
	25. Ways to Prolong the Lifecycle of PPS Teams	55
	26. Benefits of PPS to The Individuals	55
	27. Benefits to The Organization Gained from PPS	56
•	28. Key Differences Between Traditional & Empowered Team Organization	66

.

•