

**AN EMPIRICAL STUDY ON QUALITY CIRCLE IN
MANUFACTURING UNIT WITH SPECIAL REFERENCE TO
PUNE DISTRICT**

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ABSTRACT

In the competitive market demand for higher quality products are currently the major task in front of management. & management search for greater efficiency. In manufacturing unit high cost, decreasing profit margins, inconsistency of quality of products & delivery of such products in the competitive market. These factors have encouraged many organizations to focus on ways to increase the contribution of employees to improvements in quality & productivity.

Quality Circle is one of the employee participation methods which implies the development of skills, capabilities, confidence & creativity of the people through cumulative process of education, training, work experience & participation .It is a people – building philosophy, providing self – motivation & happiness in improving environment without any compulsion or monetary benefits.

Keywords: *quality product, productivity, philosophy, motivation, monetary benefits.*

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INTRODUCTION

Various factors play major roles in the current world industry's search for improved quality and productivity. Stiff competition at national and international level and consumer's awareness require production of quality goods and services for survival and growth of the company. Quality and productivity are more likely to bring prosperity into the country and improve quality of work life. Quality is a relative term and it is generally used with reference to the end use of the product.

However, the management looks to achieve customer satisfaction by running its business at the desired economic level. Both these can be attained by properly integrating quality development, quality maintenance and quality improvement of the product.

The integration of these three aspects of a product can be achieved through Total Quality Management which is a process designed to focus on customer expectations, preventing problems, building commitment to quality in the workforce and promoting open decision-making.

Companies especially start-ups are facing problem and it's a big challenge for time to ensure quality work. It's very important to motivate employees to more focus on quality as it increases profit, productivity by avoiding rework and saves time. Therefore many companies are working to introduce quality circles within their companies.

QUALITY CIRCLE

"Quality Circles are small groups of people doing similar work who, together with their supervisors volunteer to meet for an hour a week to study and solve work related problems which affect them. Circle leaders and members are trained in simple problem solving techniques which identify causes and develop solutions. At an appropriate time, presentations are made by the quality circles to the management who decide whether to accept, modify or decline the proposals."

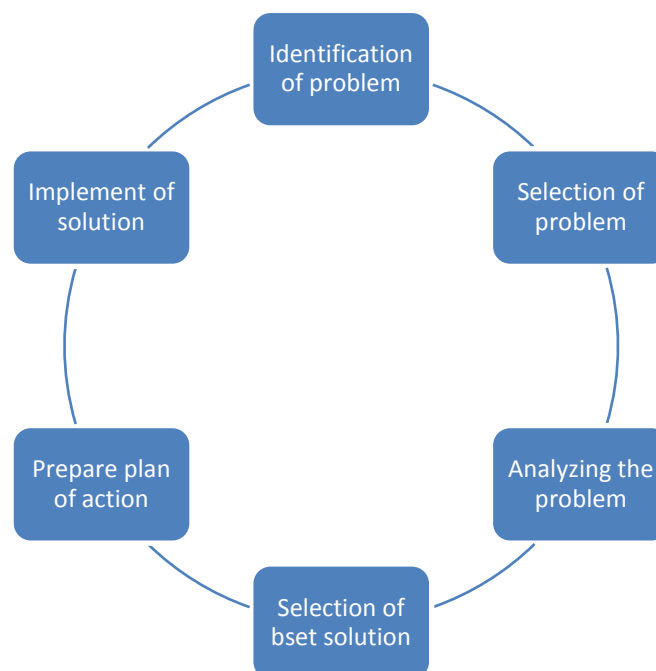
OBJECTIVES OF QUALITY CIRCLES

- a) To explore the impact of quality circle on the turnover among the employees in the industries.
- b) To find out the degree of involvement of the employees in the decision-making process of the industries.
- c) To study the level of job satisfaction of the employees from the quality circle concept.

TOOLS AND TECHNIQUES OF QUALITY CIRCLE

- a) **Benchmarking:** It is the process of learning how other organizations do exceptionally high- quality things. For example, an organization can identify the most important features of its product from customer's point of view, examine the products of its competitors and strive to equal or surpass the best job on each feature.
- b) **Outsourcing:** It is the process of subcontracting services and operations to other organizations that can do them cheaper and better. If a business organization performs each and every one of its own business services and operations, it is most likely to be doing at least some of them in an inefficient and low quality manner. If those activities can be identified and outsourced, the organization will save money and realize a higher- quality service or operation.
- c) **Speed:** Speed is the time needed by an organization to get its activities, including developing, making and distributing products or services, accomplished. Many organizations today are using speed for competitive advantage.
- d) **Statistical Quality Control (SQC):** As the term suggests SQC is primarily concerned with managing quality Moreover, it is a set of specific statistical techniques that can be used to monitor quality.
- e) **ISO 9000:** It refers to set of quality standards created by the International Organization for Standardization. There are five sets of standards covering area such as product testing, employee training, record- keeping, supplier relations, and repair policies and procedures.

Model of Quality circle –



BENEFITS OF QUALITY CIRCLES TO THE ORGANIZATION

- a) **Improve:** employer-employee's relationships
- b) **Develop:** participative culture and team spirit
- c) **Reduce:** work related errors.
- d) **Increase:** productivity and reduce cost
- e) **Improve:** quality of goods and services produced by the firm.
- f) **Leads:** to better efficiency in the organization.
- g) **Create:** consciousness regarding quality, cost, safety, housekeeping, etc.
- h) **Save:** a certain amount of managerial time previously spent to solve problems which will be now solved by quality circle.

BENEFITS OF QUALITY CIRCLES TO THE EMPLOYEES

- a) **Provide:** job interest which is absent in the routine work.
- b) **Give:** sense of participation.
- c) **Develop:** latent problem solving capabilities of the employees.
- d) **Improve:** individuals communicate abilities.
- e) **Advance:** employee's career and personal development.
- f) **Inculcate:** team spirit.
- g) **Provide:** improved work environment and work methods.
- h) **Improve:** morale on the shop.
- i) **Involve:** workers in decision - making.
- j) **Remove:** frustration.
- k) **Encourage:** employees to get involved with common goals of the company.

IMPACT OF QUALITY CIRCLE



METHODOLOGY OF THE STUDY

This study is concerned to **Tertiary Sectors** so the researchers have collected the data both from the primary and secondary sources.

The primary data with the help of field investigations **i.e. through structured questionnaire** in the tertiary sectors to find out the relationship that exist between employer and employee, for quality circle is beneficial to both of them. In this study, the questionnaire method of data collection is best suited due to its application in collection of data at a large scale.

The secondary data was collected through various published and unpublished sources from the following sources:

a) Internal Sources:

- 1) Annual Reports of the companies
- 2) Budgets of the companies.

b) External Sources:

- 1) Reference books
- 2) Internet
- 3) Published articles and thesis Sampling Techniques

Sample Area:

Responses for the questionnaire were gathered from the **5 nos. of various manufacturing unit i.e Engineering co. , Automobile co. , Chemical co.**

Sample Size:

The respondents were **30 Managers and 70 Employees** from industries.. , out of **which 10 managers & 24 employees were responded.**

Structure of Questionnaire:

Two structured questionnaires were designed to examine the level of training received, the purpose of Quality Circles participation, suggestions, communication, leadership, job satisfaction. One questionnaire for the managers where 6 questions were framed and the other questionnaire for the employees where 10 questions were framed.

Data Analysis Tools:

Questionnaire was analyzed by using simple percentage method.

Findings & Discussion:

(From the Managers Questionnaire) Total Respondents: 10

- a) Among the total respondents, 6 (60%) managers conduct quality circle meet in every 1 month whereas only 4 (40%) managers conduct in every 2 months in their organization.

b) From the survey undertaken 6 (60%) managers are interested in forming the quality circle, whereas only 4 (40%) managers are not interested in the formation, for the reason that there is lack of initiative ness from the employee's side and lack of awareness about the importance of Quality circle.

c) From the survey undertaken 8 (80%) managers expect commitment, initiative ness and customer attention from the employees, where as only 2 (20%) manager expect punctuality.

d) Among the total respondents, 8 (80%) managers approach the employees for their participation in the quality circle through meetings, consultation, notice, telephone, whereas only 2 (20%) manager approach through consultation.

e) From the survey undertaken 8 (80%) managers get right response from their employees regarding quality circle, whereas only 2 (20%) manager gets no response.

Findings & Discussions:

(From the Employees Questionnaire) Total Respondents: 24

a) From the study undertaken 20 (84%) employees have participated in a circle in less than 6 months,' whereas 2(8%) employee in 1 year, & only 2(8%) employee in 2 years.

b) Among the total respondents, 20 (84%) employees enjoy being a member of the quality circle, whereas only 4(16%) employees do not enjoy being a member.

c) From the study undertaken 18(76%) employees expect communication from their managers through meetings, whereas 2(8%) employee through notice board & 2(8%) employees through their immediate heads, whereas only 2(8%) employees expect through telephone.

d) Among the total respondents, 18(76%) employees believe that their manager honors their suggestions, whereas only 6(24%) employees believe that their managers do not honour their suggestions.

c) From the survey undertaken 17(71%) employees believes that their contributions improves the quality of work in their organizations, whereas 7(29%) employees believes that their contribution does not improves the quality of work.

f) From the survey undertaken 15(63%) employees think that their co-workers are satisfied with the quality circle, whereas 9(37%) employees think that their co-workers arc not satisfied.

g) Among the total respondents, 17(71%) employees think that their managers should provide training facilities to improve the functioning of quality circle, whereas 3(12%) employees think that no training required & 4(16%) employees have not commented on this question.

h) Among the total respondents, 16(64%) employees feel burdened being the member of quality circle, 4(16%) employees do not feel burdened, whereas 5(20%) employees have not commented on this, question.

i) From the study undertaken, 18(76%) employees believe that quality circle can meet the expectations of their customers, whereas only 7(24 %) employees do not believe.

j) Among the total respondents, 18(76%) employees' efforts are appreciated within their organization, whereas only 3(12%) employees efforts are not appreciated & 3(12%) employees have not commented on this question.

LIMITATIONS OF THE STUDY

No study is complete in all respects. There are some aspects and issues which could not be covered in this study due to certain limitations. Insufficient availability of data related to the study was one of the hurdles in the compilation of data. So, this study is based on limited and available primary as well as secondary data. As well as time constraint was also one of the reasons.

RECOMMENDATIONS

Participation must be voluntary. It is hoped that those who are concerned with quality would come forward on their own to suggest ways and means to improve upon it.

The members of QC should be thoroughly trained in statistical analysis (graphs and table reading, histograms, scatter diagrams stratification, etc.) because this helps in information processing. Since they have to work in groups, an understanding of group dynamics is also necessary. Additionally they should develop a problem-solving approach.

They should have full freedom to choose any problem which they feel is most crucial. In addition they should be free to implement and monitor the results.

The QC cannot be a successful exercise unless the opportunities to meet frequently are allowed. Hence, facilities for such meetings should be provided without hitch or hindrance.

QC is not quick solution to the problems of quality. Management must be willing to go through the often painstaking and slow task of changing. As the management needs ample time to be introduced to the concept of QC and so must be ready and willing to receive ideas about structuring, managing, and operating.

SPECIFIC SUGGESTIONS FOR MANUFACTURING UNIT

a. Organize workshops and seminars to bring about greater awareness of quality circles.

b. Initiate specific research projects in this field.

c. Developing special programmes for various classes of employees.

- d. Developing a network for collection, storage and dissemination of information on quality work life.
- e. Education and making employees aware of quality work life.
- f. Tapping the creative intelligence of the persons working in the banks and to make full use of its human resources.
- g. Improving communication within the organization.
- h. To respect humanity and build a happy bright work place environment which is meaningful to work in.
- i. Involving workers in decision making process.
- j. A re- examination of policies of work.
- k. Provision of physical-amenities at the work place, health and safety, and welfare provisions.
- l. To enrich human capability, confidence, moral, attitude and relationship.

SPECIFIC SUGGESTIONS FOR GOVERNMENT

- a. Executive action to ensure implementation of legislated facilities.
- b. Encouragement and adoption of appropriate technology.
- c. Suitably modifying the structure and scope of education in the country.

CONCLUSION

In today's economy Quality Circle is appropriateness for use and the tactic implemented is to avert imperfections in services rather than verification and elimination. Hence, the attitude of employees influences the quality. It encourages employee participation as well as promotes teamwork. It generally recommends solutions for quality and services which may be implemented by the management. Thus Quality Circle is not merely a suggestion system or a quality control group but extends beyond that because its activities are more comprehensive. Furthermore, it is not a taskforce because it can be made a permanent feature of the organization or a department.

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