IDENTIFICATION OF FACTORS IN IMPLEMENTATION OF QUALITY CIRCLE

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ABSTRACT

Quality circle (QC) is a management tool which is most widely utilized for enhancing the effectiveness of equipment's in an organization. QC provides a lot of benefits such as increase in product quality, improvement in organizational performance, motivation and team work among the employees etc. But, implementation of QC is not an easy task as it is full of lots of hurdles. The main objective of this paper is to identify the critical factors which help in the successful implementation of QC programs in manufacturing organization.

Keywords: Quality Circle, Factors, Identification, Implementation, Organization

I. INTRODUCTION

In olden times Indian industries were practicing on older concept of system, to manage the scientific techniques. The disadvantages of which were barrier of mistrust, Individualism & non-involvement of employees in management of organization. A quality circle is a volunteer group, composed of regular employees, who meet to discuss workplace improvement & make presentation to management with their ideas especially relating to quality of output. It improves the performance of the organization, motivates &enriches the work life of employees (Chaudhary and Yadav, 2012). In this some groups of employees are formed for performing some task and training is given to the groups in solving the problems and using the statistical tools. The employees are encouraged for team work and motivated to work in cooperative manner. These employees work in groups and for the effectiveness of the organization. These groups find out the solutions for the quality and services which can be implemented in the organization for obtaining better results. The members of the Circle are the employees who can have influence in problem solving or to those members affected by the problems. They often meet once a week, meetings that approximately last an hour. During the meetings, the members of the Circle analyze the problems in details. After the frequent meetings, the members of Quality Circles propose the solutions of the problems that are closely related to their daily activities. In order to come up with the best problem solutions, the members have to attend the induction trainings by using the newest methods and techniques (Syla et al., 2013).

II. BENEFITS OF QUALITY CIRCLE

There are many benefits from QC implementation; some of those benefits are as follow(Attri et al., 2014):

☐   Increase in company quality awareness;

☐   Increase in product quality awareness;

☐ Improvement in management;

☐ Improvement of customer relations;

☐ Improvements in the products and services offered;

☐ Improved relationships within the organization;

☐ Greater customer satisfaction; and

☐ Increased respect from competitors.

III. QC IMPLEMENTATION PROCESS

The steps involved in the implementation process of Quality Circle (Figure 1) are as follows:

1. Identification of problem: First of all the problem is identified by the Quality Circle members which is to be solved.

2. Analysis of the problem: The selected problem is then analyzed by basic problem solving techniques.

3. Generate alternative solution: On the basis of various causes, the alternative solutions are generated.

4. Selection of best solution: The best and the most suitable solutions are selected from the alternative solutions.

5. Prepare action plan: The members prepare plan for the area of implementation, date, time etc.

6. Presentation of solution to management: The solution is then presented before the management for the approval.

7. Implementation of solution: The management evaluates the solution and implement it for a small run to check its reliability.
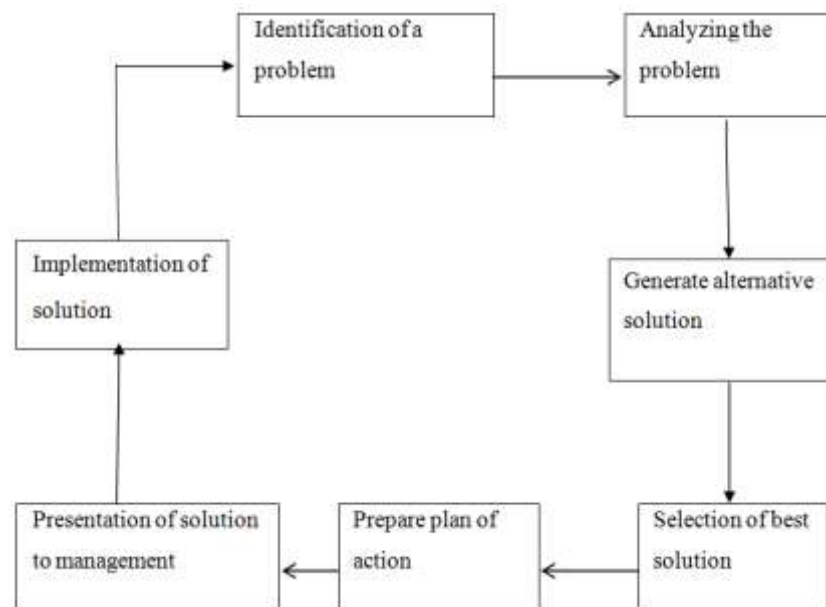

Figure 1: Working model of Quality Circle (Modified from Gaikwasd and Gaikwad 2002)

IV. FACTORS AFFECTING IMPLEMENTATION OF QC

- **Top management commitment and support:** The success of any management practices relies significantly on the maturity level of senior management leadership and commitment. Direct involvement of top management allows all decisions to be made quickly and facilitate QC journey (Patterson et al., 1995). Top management support is necessary to prove the availability of concrete actions.

- **Employee involvement:** Employee involvement is a process for empowering employees to participate in managerial decision-making and improvement activities appropriate to their levels in the organization (Brown et al., 2005). Innovation and technology incorporate the innovation into corporate culture, encouraging new ideas and processes and solutions by all the employees of the firm.

- **Providing Education and Training:** Increased involvement means more responsibility, which in turn requires a greater level of skill. This must be achieved through training. Quality training includes educating and training all employees, help employees to increase knowledge, provide information about the mission, vision, direction and organization structure to enable them to gain skills in an effort to improve the quality and thus solve the problem (Dale, 2009).

- **Flexibility:** Flexibility in operations and delivery may enable the user to give customized service to its customers, particularly in special or non-routine requests. Logistics flexibility, related to the different logistics strategies, which can be adopted either to release a product to a market (downstream or distribution flexibility) or to procure a component from a supplier (upstream or procurement flexibility (Adeleye and Yusuf, 2006).

- **Motivation:** Motivational factors can be divided into two factors i.e. external and internal factors. The first ones are related to improvements in terms of marketing and promotional aspects, increase in customer satisfaction and the improvement of market share, while internal benefits are related to organizational improvements, the reward system, team work, the measurement of performance and communication, continuous improvement (Kassicieh et al., 2008).

- **Strategic Planning:** Quality may be considered as a strategic competitive tool, and organizations cannot afford to ignore the strategic implications of quality for their competitive position. Strategic planning will result in a strategic training plan, and it can be used to predict the future training needs based on employee needs and demands of consumers (Patterson et al., 1995).

- **Proper Communication:** Communication inextricably linked in the quality process, yet some executives find it difficult to tell others about the plan in a way that will be understood (Brown et al., 2005). An additional difficulty is filtering. As top management's vision of quality filters down through the ranks, the vision and the plan can lose both clarity and momentum.

- **Continuous Improvement:** Very important is the continuous improvement stage of the post-certification period. The continuous improvement stage is actually the phase where the maintenance of the quality system is carried out. This phase is important if an organization wants to continuously improve and reap the long term benefits of having a quality management system in place (Dale, 2009).

- **Customer Satisfaction:** Quality Circle is a system focusing on customer satisfaction. The Quality Circle concept is one of the modern management concepts, which helped to increase the competitiveness between organizations. This has resulted from the level of customer awareness, which helps them to select a product

or service of high quality and at a reasonable price (Ali and Shastri,2010).

☐ **Proper Empowerment:** Employees have to take more responsibility with regard to their involvement in a team, in order to exert greater authority over their work environment. Employee involvement is a process for empowering members of an organization in decision making and to problem solving appropriate to their level in the organization (Casadesus and Gimenez, 2009).

☐ **Financial Resources:** There is a multitude of variables that could influence a company's business financial performance. From the financial perspective, Quality Circle certification would be beneficial to the promotion of activities, improvement of profitability and the productivity of facilities (Park, 2007)

☐ **Proper Leadership:** Top leadership is the key to any QC program and the driving force behind success and failure. Leadership associated with clear vision and directions can foster knowledge sharing and generate commitment (Ali and Shastri,2010).

☐ **Culture Change:** The principles of quality must be embedded into the culture of the organisation to foster the climate of open co-operation and teamwork among members of staff, suppliers and customers. Many researchers have showed from their work that culture of the organization should be such that it can accommodate the values of QMS system.

☐ **Process Approach**: A desired result is achieved more efficiently when activities and related resources are managed as a process. Process should be simple and easily understandable. Many researchers in their research have discussed that the approach should be simple so that the workers do not oppose the approach and work in a cooperative manner.

V. CONCLUSION

Quality Circle (QC) is a very effective tool which helps in solving many problems like decision making, consumption, effective management etc. For the effective implementation of QC, the top management of the organization must provide adequate training and education to their employees. This will in the improvement of attitude of the employees for their enthusiastically participation in the quality circle programs. So, this paper tries highlighting the main factors which helps in the implementation of QC in manufacturing organizations. These critical factors will enable the organization to develop proper strategies for effectively utilizing them in the successful implementation of QC programs.

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