Quality Circle as an Effective Management Tool :
A Case Study of Indira College of Engineering
and Management Library

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Abstract

Author has studies the role of quality circle as a management tool to enhance the effectiveness of library services. It argues that the concept encourages employee participation as well as promotes teamwork and motivates people to contribute towards organizational effectiveness through group processes . Paper concludes that If concept is appropriately implemented in the field of Library and Information Science the results and conclusions outcomes will not only be amazing but it will also help us to stumble on outtide over our own lacunae and facilitate designing of a better system.

Concept and Definition of Quality Circle

"A Quality Circle is volunteer group composed of members who meet to talk about workplace and service improvements and make presentations to their management with their ideas." (Prasad, L.M, 1998)[1]. These are related especially to the quality of output or services in order to improve the performance of the organization / department and motivate and enrich the work of employees. This group carries on continuously as a part of organization-wide control activities, self and mutual developments and control and improvement within the workplace utilizing quality control techniques with all the members participating. Generally six to twelve volunteers from the same work area make up a circle. The members receive training in problem solving, statistical quality control and group processes. Quality Circle 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.

Objectives of Quality Circle

The perception of Quality Circles today is 'Appropriateness for use' and the tactic implemented is to avert imperfections in services rather than verification and elimination. Hence the attitudes of employees influence the quality. It encourages employee participation as well as promotes teamwork. Thus it motivates people to contribute towards organizational effectiveness through group processes. The following could be grouped as broad intentions of a Quality Circle:

1. To contribute towards the improvement and development of the organization or a department.

2. To overcome the barriers that may exist within the prevailing organizational structure so as to foster an open exchange of ideas.

3. To develop a positive attitude and feel a sense of involvement in the decision making processes of the services offered.

4. To respect humanity and to build a happy work place worthwhile to work.

5. To display human capabilities totally and in a long run to draw out the infinite possibilities.

6. To improve the quality of products and services.

7. To improve competence, which is one of the goals of all organizations.

8. To reduce cost and redundant efforts in the long run.

9. With improved efficiency, the lead time on convene of information and its subassemblies is reduced, resulting in an improvement in meeting customers due dates.

10. Customer satisfaction is the fundamental goal of any library. It will ultimately be achieved by Quality Circle and will also help to be competitive for a long time.

Basic problem solving techniques

The following techniques are commonly used to analyze and solve problems:

1. Brainstorming

2. Pareto analysis

Pareto analysis means choosing the most important changes to make. It is a very simple technique that helps you to choose the most effective changes to make. The Pareto Principle states that, 'by doing 20% of the work you can generate 80% of the advantage of doing the entire job. It is a formal technique for finding the changes that will generate major results. It is useful where many possible courses of action are competing for your attention.

Pareto analysis not only shows you the most important problem to be solved but it also gives you the score showing how severe the problem is. It is the only application of this important 80/20 principle.

The technique was developed by Vilfrido Pareto [2], an Italian economist who noted that approximately 80% of wealth was owned by only 20% of the population.

Cause and Effect Analysis (Ishikawa/ Fishbone analysis)

It means identifying the likely causes of a problem thoroughly. Their major benefit is that, they push you to consider all possible causes of the problem, rather than just the ones that are more obvious. This approach combines brainstorming with use of a type of a concept map.

Suggested steps for conducting Cause & Effect Analysis

Identification of a problem

Pen down the exact problem that you face in detail. Identify who are involved, what is the problem and when and where it occurs.

Workout the major factors involved

Identify the factors that cause the problems. Draw lines off the spine for each factor and label it. Those may consist of people involved in the problem, systems, equipments, materials, external forces etc.

Identify the possible causes

Analyze your diagram
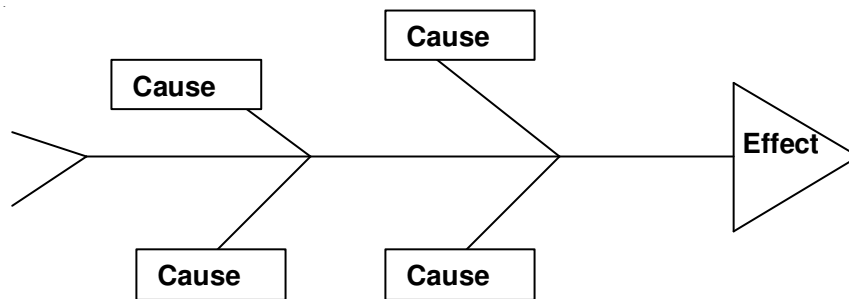
Example of Cause and Effect Diagram

Data collection

Data collection techniques and tools

Techniques	Tools
Using available information	Checklists, data compilation forms
Observations	Eyes and other senses, pen/paper, watch, scales, microscopes etc.
Interviewing	Interview guides, checklists, questionnaires, tape recorders
Administering written questionnaires	Questionnaire

Data analysis

Case study of Indira College of Engineering and Management Library

The management of Indira group of institutes has decided to promote the library as a central library of all the institutions run by Indira. Facing such an immense responsibility in a very short span of time made it obligatory to the library staff to organize the library system in a more better and competent way. Still being at its initial stage, the library activities were encountering many small problems frequently. To name few were:

1. Missing Books.

2. Misplacements.

3. Library usage.

4. Delivery of journals.

5. Number of copies per title.

6. Allocation of work among the staff.

7. Purchase related problems etc.

A committee was initiated to study the above problems and come out with efficient solutions to meet the requirements of the management. Lot of brainstorming was conducted and it was decided to solve these problems by implementing 'Quality Circle Program'.

A group was created and the problem of missing books was selected for observation on preferential basis. It was decided to solve the above problem by cause and effect analysis and the same was presented in the following diagram before the management committee:
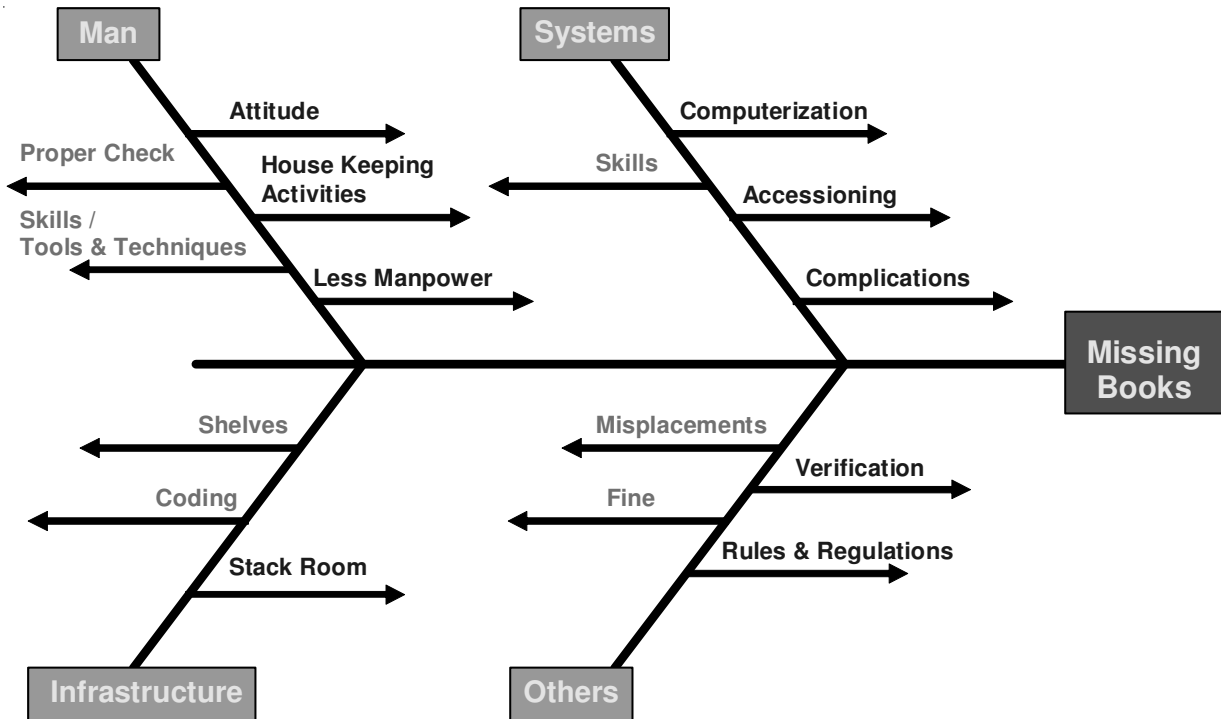
The management acknowledged the solutions and accepted to implement the same on urgent basis. It helped the library to come out with great solutions. It was also noticed during the above operation that Quality Circles, if productively put into practice it can crack countless variety of problems in any context of expertise.

Actual working of Quality Circle / Operation
The operation of Quality Circle involves the following sequential steps:

1. *Identification of a problem*: The members of the Circle are supposed to identify the problems that are to be solved.

2. *Selection of the problem*: The members then decide the preferences and select the problem of apex priority.

3. *Analysis of the problem*: The selected problem is

then classified and analyzed by basic problem solving techniques like brain storming and Pareto analysis etc.

4. *Generating alternative solutions*: Identifying various causes helps to generate various alternative solutions.

5. *Select the most appropriate solution*: The most appropriate and suitable solution is selected after considering various solutions related to cost, possibility of implementation etc.

6. *Preparation of action plan*: The members prepare plan of action to the implemented solution like area of implementation, date and time etc.

7. *Approval of the Management*: The chosen solution and the plan of action must be put forward before the management for their approval.
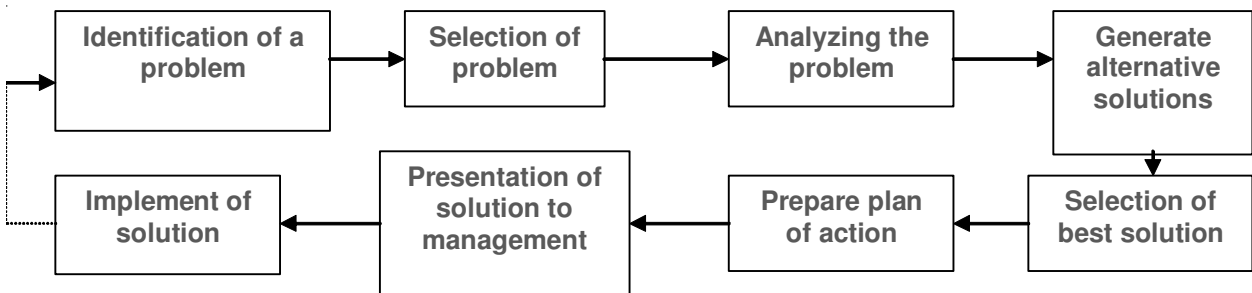
8. *Implementation*: The management evaluates the

Fig.: Working model of Quality Circle.[3]

solution and examines the same before implementation. The management may consider a pilot run also.

Conclusion

Quality Circles are not only limited to manufacturing firms but for variety of organizations where there is a scope for group based solution of work related problems. If lucratively implemented in the field of Library and Information Science the results and conclusions will not only be amazing but it will also help us to stumble on out our own lacunae and design a better system.