

HUMAN RESOURCE MANAGEMENT IN QUALITY ASSURANCE

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ABSTRACT

Quality assurance includes all the factors involved in preventing quality problems within systematic and planned activities, which means the existence of a good quality managerial system in the field of human resources. The paper presents types of organizational structures that involve all personnel of a company in the assurance and continuous improvement of quality.

KEYWORDS: human resources management, organization charts, quality circles, work teams

1. INTRODUCTION

To achieve the objectives in the field of quality, the organizational structure must be created to establish the guidelines of authority and responsibilities, to improve communication between functional units and to increase productivity.

The main tasks of the organizational structure for quality assurance consist of:

- defining the activities related to quality and the relationships between them;
- assigning responsibilities for each of the quality management tasks;
- division of tasks down to the level of workers.

The organization of activities related to quality is determined by the size of the unit, the nature of the products, the possibilities of communication, etc.

2. ORGANIZATIONAL CHART

As a rule, the organizational structure of the enterprise is graphically represented by an organizational chart.

The organizational chart highlights the channels of authority and responsibilities.

Organizational structures can be classified into:

- "in-line" structures;
- "staff" structures;
- matrix structures.

In an "in-line" structure, the specific

attributions in the field of quality are grouped by functional departments (marketing, financial-accounting, research-development, production), each having specific attributions related to quality in its own functional unit.

Figure 1 shows the "in-line" organizational structure. Dashed arrow blocks indicate the quality responsibility for each department head.

In the "staff" organizational structure, the responsibility for quality is held by the "staff", and the head of the "quality assurance" department informs the company manager about quality issues.

As can be seen on the organizational chart (figure 2), the head of the "quality assurance" department has the overall responsibility in the quality field and must be given the authority to make the necessary changes in the respective functional units, in order to implement the quality policy.

The matrix organizational structure exists in situations involving large and complex, long-term projects (nuclear power plant, space shuttle).

The tasks being specialized require the existence of a quality assurance coordinator for each project.

Figure 3 partially shows the matrix organizational structure for such situations.

The quality assurance and control supervisors for each project report to the quality assurance manager for that project.

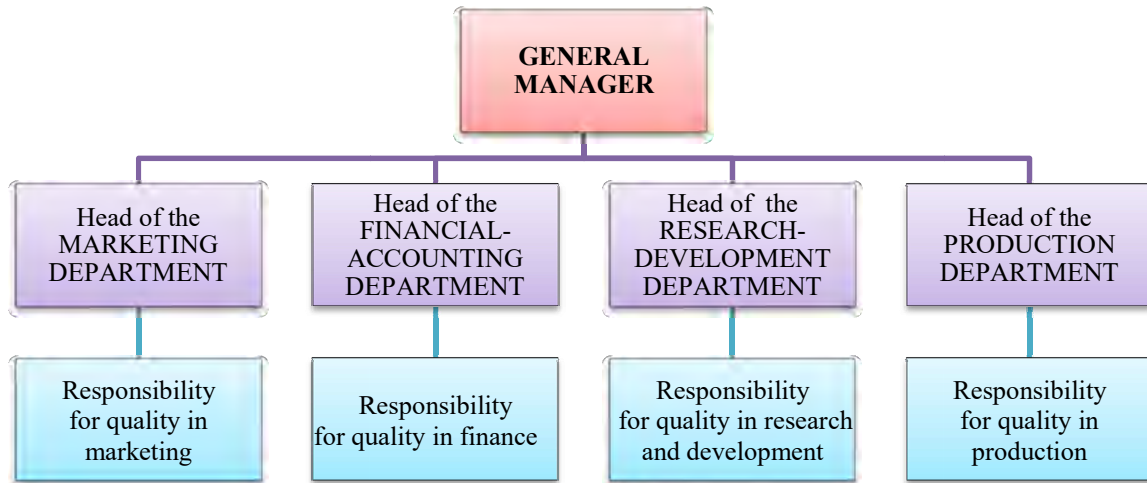


Fig.1 "In-line" organizational structure

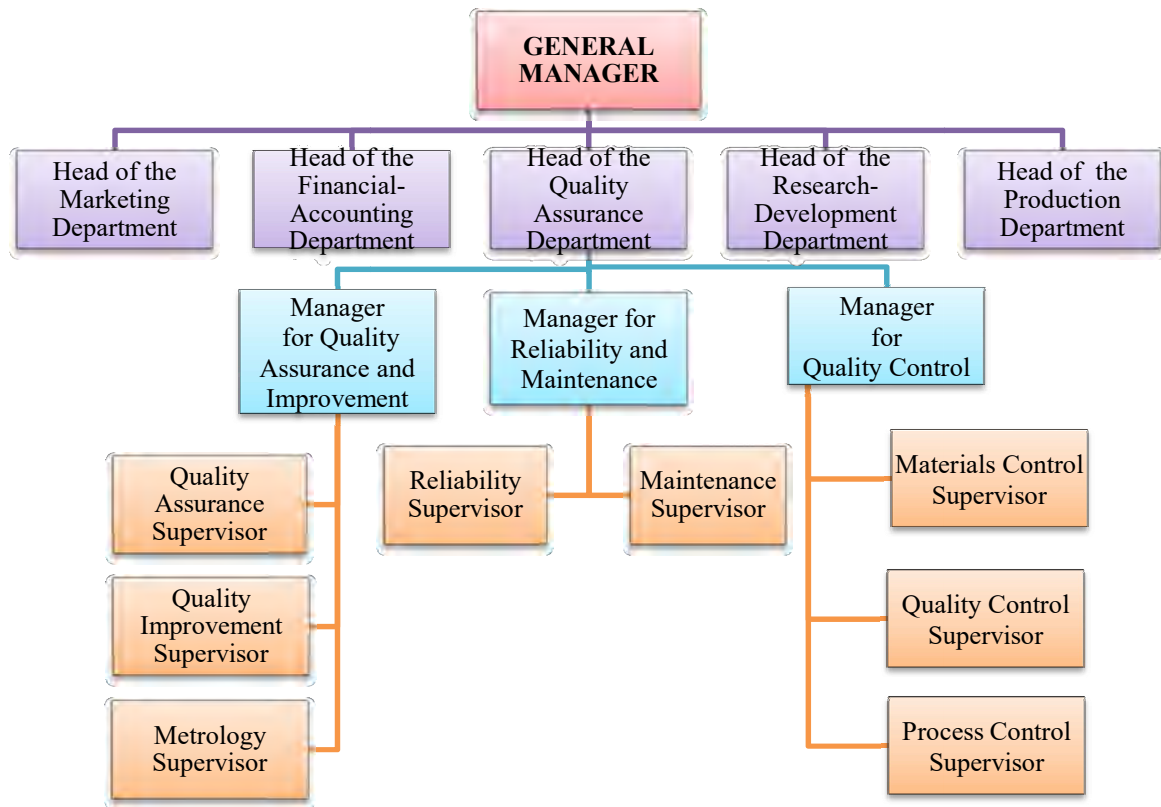


Fig.2 "Staff" organizational structure

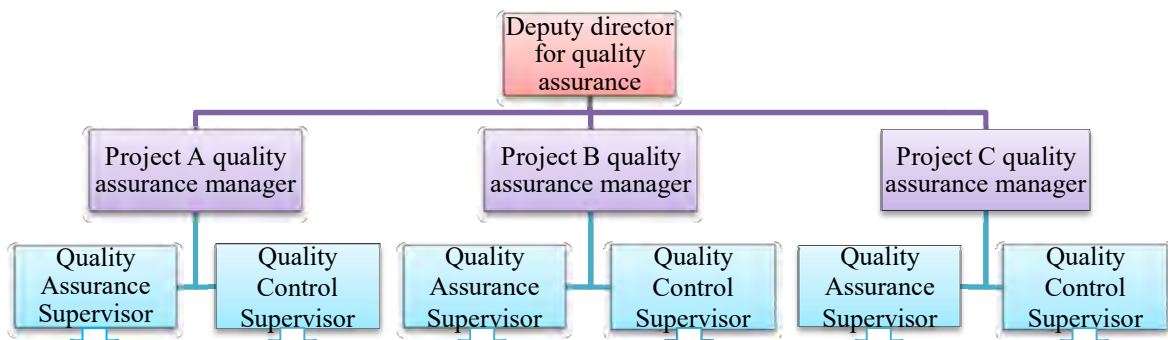


Fig. 3 Quality assurance in the matrix organizational structure

3. NEW ORGANIZATIONAL METHODS

For workers' participation in quality assurance, new organizational methods were introduced, among which can be mentioned:

- self-managed work team;
- quality circles.

The self-managed work team consists of a group of workers who plan, execute and control the work performed. For this:

- each worker must be competent in carrying out a variety of work tasks to be able to perform their rotation;
- the team must have the formal authority to plan and supervise tasks.

Self-managed teams have acquired various names: "work cells" (on product assembly lines), semi-autonomous work teams, self-supervised teams.

Following the introduction of this organizational method, numerous positive results were recorded:

- increasing productivity;
- full satisfaction of customer requirements;
- reduction of production costs;
- broad involvement of the workforce in process improvement.

Quality circles are made up of a group of people, usually from the same sector, which consists of operators, supervisors, managers and who meet regularly to analyze quality issues.

This method of organization, initiated and applied in Japan since 1962, presents the following advantages:

- improving quality for internal and external customers;
- savings on the cost price of the products;
- improving the attitude and behavior of the staff in relation to the company in which they work;
- increase supervisors' respect towards workers;
- determines a better understanding of the workers on the company's production problems;
- a better understanding of the importance of the quality of products or services.

The groups that make up the quality circles voluntarily carry out activities in order to improve the production system, to solve the problems that affect the professional field, by means of proposals for changing the work tools, proposals that must be sent promptly to the management of the enterprise.

Thus, a fluent two-way information flow was created, from top to bottom and from bottom to top, between the first-level participatory groups- Strategic Committee, and

the second-level- Progress Groups which are composed of key people of the enterprise (executives of leadership) and of the third level- Quality Circles (figure 4).

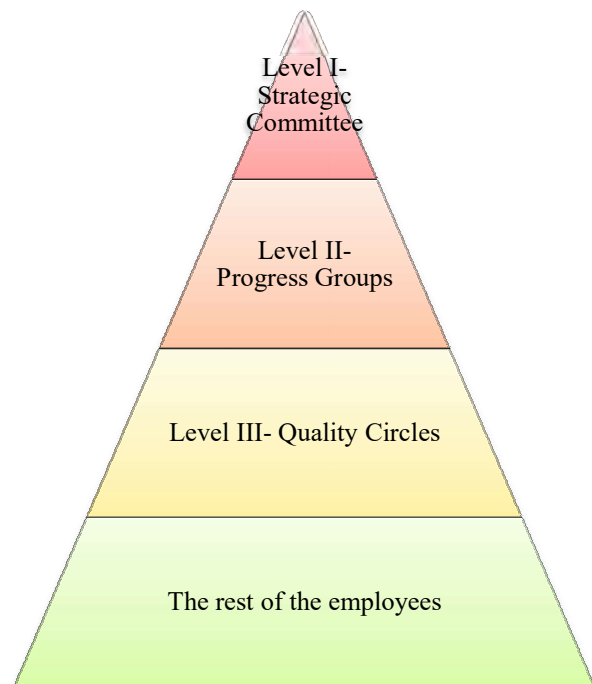


Fig. 4 The organizational pyramid of the enterprise

Experts in the field of quality management recommend the top management of organizations (economic enterprises, units providing services) to support quality circles to ensure the participation of employees in solving quality problems.

4. SELECTION AND TRAINING OF STAFF

The quality of the staff employed determines to the greatest extent the success of the implemented quality program.

In order to ensure the success of the introduction of the quality plan, in the first stage the selection of personnel for key positions must be carried out, having knowledge that will allow them to actively participate in the implementation of the plan.

In order to ensure the compatibility of the candidate with the activity he will carry out, it is necessary that training and testing be done before employment in the company.

The company's staff must have a certain level of knowledge about quality, so that employees have the ability to suggest changes that lead to quality improvement.

Periodically, all staff must be trained, starting with top managers with training on the

mission of the unit and its strategy and continuing with all employees with training on statistical control methods and the importance of their application and compliance.

Other topics of the training program may be:

- the quality system;
- organization of teams;
- benchmarking;
- the method of failure mode analysis, effects and their criticality (FMECA).

Staff training and specialization allow employees to better know the products and applied processes, and with the modification of product designs as a result of changing consumer requirements, retraining may be necessary for certain categories of workers.

5. CONCLUSIONS

The paper presents the importance and the role played by human resources in quality assurance within the employing company.

Choosing the right organization chart is of major importance in achieving the quality management objectives.

The role of management in an enterprise is to ensure everything necessary to enable employees to obtain quality products or services.

This creates the possibility for employees to take responsibility for the quality of their own work, thus contributing to quality improvement.

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