QUALITY CONTROL & QUALITY ASSURANCE

Introduction

Quality is an important factor when it comes to any product or service. With the high market competition, quality has become the market differentiator for almost all products and services.

Therefore, all manufacturers and service providers out there constantly look for enhancing their product or the service quality.

In order to maintain or enhance the quality of the offerings, manufacturers use two techniques, quality control and quality assurance. These two practices make sure that the end product or the service meets the quality requirements and standards defined for the product or the service.

There are many methods followed by organizations to achieve and maintain required level of quality. Some organizations believe in the concepts of Total Quality Management *TQM* and some others believe in internal and external standards.

The standards usually define the processes and procedures for organizational activities and assist to maintain the quality in every aspect of organizational functioning.

When it comes to standards for quality, there are many. ISO *InternationalStandardsOrganization* is one of the prominent bodies for defining quality standards for different industries.

Therefore, many organizations try to adhere to the quality requirements of ISO. In addition to that, there are many other standards that are specific to various industries.

As an example, SEI-CMMi is one such standard followed in the field of software development.

Since standards have become a symbol for products and service quality, the customers are now keen on buying their product or the service from a certified manufacturer or a service provider.

Therefore, complying with standards such as ISO has become a necessity when it comes to attracting the customers.

Quality Control

Many people get confused between quality control *QC* and quality assurance *QA*. Let's take a look at quality control function in high-level.

As we have already discussed, organizations can define their own internal quality standards, processes and procedures; the organization will develop these over time and then relevant stakeholders will be required to adhere by them.

The process of making sure that the stakeholders are adhered to the defined standards and procedures is called quality control. In quality control, a verification process takes place.

Certain activities and products are verified against a defined set of rules or standards.

Every organization that practices QC needs to have a Quality Manual. The quality manual outlines the quality focus and the objectives in the organization.

The quality manual gives the quality guidance to different departments and functions. Therefore, everyone in the organization needs to be aware of his or her responsibilities mentioned in the quality manual.

Quality Assurance

Quality Assurance is a broad practice used for assuring the quality of products or services. There are many differences between quality control and quality assurance.

In quality assurance, a constant effort is made to enhance the quality practices in the organization.

Therefore, continuous improvements are expected in quality functions in the company. For this, there is a dedicated quality assurance team commissioned.

Sometimes, in larger organizations, a 'Process' team is also allocated for enhancing the processes and procedures in addition to the quality assurance team.

Quality assurance team of the organization has many responsibilities. First and foremost responsibility is to define a process for achieving and improving quality.

Some organizations come up with their own process and others adopt a standard processes such as ISO or CMMi. Processes such as CMMi allow the organizations to define their own internal processes and adhere by them.

Quality assurance function of an organization uses a number of tools for enhancing the quality practices. These tools vary from simple techniques to sophisticated software systems.

The quality assurance professionals also should go through formal industrial trainings and get them certified. This is especially applicable for quality assurance functions in software development houses.

Since quality is a relative term, there is plenty of opportunity to enhance the quality of products and services.

The quality assurance teams of organizations constantly work to enhance the existing quality of products and services by optimizing the existing production processes and introducing new processes.

Conclusion

When it comes to our focus, we understand that quality control is a product-oriented process. When it comes to quality assurance, it is a process-oriented practice.

When quality control makes sure the end product meets the quality requirements, quality assurance makes sure that the process of manufacturing the product does adhere to standards.

Therefore, quality assurance can be identified as a proactive process, while quality control can be noted as a reactive process.