



The Principles of quality management

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Abstract: *A Quality Management Principle is defined by the ISO Technical Committee 176 (ISO / TC 176) as a fundamental and comprehensive rule / conviction applied to run and operate an organization aiming to continuously improve the performance of the term long through customer focus while addressing the requirements of all other stakeholders. "For the quality management, eight principles were considered fundamental. All the requirements of ISO 9001: 2015 are related to one or more of these principles, which are the basis for the requirements, thus justifying their importance.*

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Introduction

Increasing the performance of a company implies the assumption of a quality level for both the economic assets and the management system. So it is considered necessary for a company to define quality management principles, analyze, specify and implement them at company level by involving the organization's internal and external environments.

The eight principles of quality management are represented by:

- Customer oriented organization
- Leadership;
- Involvement of staff;
- The procedural approach;
- Systematic approach to management;
- Continuous improvement;
- The factual approach to decision making;
- Mutually beneficial relationships with suppliers.



The descriptive analyse of Principles of quality management

Principle 1: Customer oriented organization. Organizations depend on their clients and should therefore understand their present and future needs, satisfy their requirements and try to overcome them. Customers are the engine of every organization; organizations cannot exist in isolation but on the market by offering products and services to customers. It should be emphasized that, basically, customers are not simply buyers but individuals or organizations that receive a product or service from the organization.

Customer focus means striving to meet customer satisfaction and understanding that profitability or avoidance of loss results from customer satisfaction. Profit is not the only reason for the existence of an organization, which is necessary for the development of the organization so that through its activities it can satisfy more clients. If a business focuses exclusively on profit and will avoid determining customer requirements, it will lose its customers and, as a result, will reduce profits in the long run.

Customer orientation means organizing the firm's business in a procedural form that will turn customers with needs into satisfied customers. This will mean, in fact, that all processes are customer-oriented.

Because of this principle, all members of the organization, not just top level managers or business department staff, need to focus on the customer.

An organization that applies the customer orientation principle will be one in which employees will demonstrate that:

- They understand the needs and expectations of customers;
- They have met the needs and expectations of all stakeholders;
- They communicated these needs and requirements to the entire organization;
- Have the knowledge, skills and resources to satisfy the organization's customers;
- Have evaluated customer satisfaction and acted according to the results;
- Managed customer relationships;
- They directly linked their goals and objectives to the needs and expectations of their customers.

For the most consistent application of this principle, the following steps are generally followed:

1. Understand customer needs and expectations at product level, delivery, price, reliability, and so on.
2. Ensure a balanced approach to the needs and expectations of customers and other stakeholders (owners, suppliers, local communities or society as a whole);
3. Communicating these needs and expectations throughout the organization;
4. Values of customer satisfaction and action on results;
5. Managing customer relationships.

Among the most important benefits of applying this principle, we can note:

- Increasing revenue and market share through flexible and rapid responses to market opportunities;
- Increased efficiency in using the organization's resources to increase customer satisfaction;
- Increased customer loyalty that will lead to repeating or strengthening the business relationship.

Principle 2: Leadership. Leaders are the ones who achieve the unity between the purpose and the



orientation of the organization. They should create and maintain an internal environment where employees can fully engage in achieving the organization's goals. Leaders exist at all levels of an organization and do not just climb to higher levels.

Each team must have a leader who, for example, provides a model in line with the organization's values.

Leaders are responsible for the internal environment, if employees are unhappy, unmotivated and unhappy; it is only the guilt of the leaders. Culture, vision, values, beliefs and motivation in an organization are due to leaders. A good leadership tries to create a set of common values, a common vision so that everyone knows what the organization does and where it is heading. Their lack and a disparate mix of values will always create conflicts and anxiety within the organization.

Applying leadership to an organization can only be done if leaders:

- They are proactive and lead by example;
- I understand and respond to changes in the external environment;
- Takes into account the needs of all stakeholders, including customers, owners, suppliers, local communities or society in general;
- Establish a clear vision of the organization's future;
- Establish common values and ethical models at all levels of the organization.
- Creates confidence and eliminates fear;
- Provide employees with the necessary resources and the freedom to act responsibly and responsibly;
- Inspire, encourage and recognize employees' contributions within the organization;
- Promotes open, direct and sincere communication;
- Educate, train and coordinate employees;
- Set goals and tasks with a high degree of difficulty;
- Implements the strategy by which these goals are achieved and the tasks are carried out.

Among the most important benefits of applying this principle are:

- The ability of employees to understand and be motivated towards the goals and objectives of the organization;
- Assessment of, alignment and implementation of activities in a unified way;
- Minimizing communication errors between organization levels.

Principle 3: Employee involvement. Employees at all levels are the essence of an organization and their full involvement allows the skills they possess to be used for the benefit of the organization. Closed management leads to lack of trust in the workforce. Managers at all levels have to operate and operate with integrity. It is not unusual for those affected by decisions to be absent from talks with decision-makers.

Decision-passing decisions are much more likely to be taken when those affected by them are involved. Every person involved has knowledge and experience that exceeds the job barrier and the assigned responsibilities.

Thus, this principle means that management harnesses this source of knowledge, encourages staff to contribute with and use their personal experience. It also means managers need to be open and not to hide the discussions or decisions taken, unless national or business security could be threatened.



An organization that applies employee engagement is one where employees:

- Accepts responsibility for solving problems;
- Active search for improvement opportunities;
- Actively seeks opportunities to increase their skills, knowledge and experience;
- Participate in a free exchange of knowledge and experience within teams and working groups;
- Focuses on creating value for customers
- They are innovative and creative in promoting the goals of the organization;
- Participate in a better presentation of the customer organization, local communities and society in general;
- Get satisfaction from your work;
- They are enthusiastic and proud to be part of the organization.

The main benefits of applying this principle are the existence of:

- Employees motivated and involved in the organization;
- Some employees responsible for their own performance;
- Some employees willing to participate in and contribute to continuous improvement;
- Innovation and creativity in promoting the organization's goals.

Principle 4: The procedural approach. A desired result is achieved with high efficiency when resources and related activities are managed as a process. All activities are a process because they use resources to perform actions that produce results. In organizational terms, such processes add value to system inputs. Processes are thus dynamic, that is why they are the cause of different things happening. An effective process is one in which results are needed to achieve the organization's goals and goals.

Every job involves people or equipment endowed with resources carrying out a series of tasks to produce a result. No matter how simple the task is, there is always an objective or reason for it to execute, consumption of resources and energy expenditure, a series of constraints that influence the way activities are performed, a sequence of actions, decisions about their correctness, a rationale for finalization, and a result that must be the one expected.

The organization exists to create and satisfy its customers and stakeholders, and the processes of the organization must serve the needs of these stakeholders. A process can produce scrap, as a procedure can scatter resources - so processes need to be managed efficiently to get the results to be achieved. The process's management approach is therefore not simply the transformation of inputs (resources, raw materials) into outputs (outputs, products or services) that meet the requirements, but is the efficient management of processes.

An organization that applies the principle of procedural approach is where the participants in the economic process:

- Set up what they want to do - what are the goals they want to achieve or what results they want to deliver;
- Establish successful measures - the factors that will indicate whether the objectives have been achieved or whether the results meet the requirements;
- Define activities that are critical to achieving goals and delivering results;



- Identifies the interfaces between the processes and functions of the organization, external customers, suppliers and other stakeholders;
- I clearly define the responsibility, authority and responsibility of process management;
- Define the resources, information and skills needed to deliver the results required by the market;
- Identifies and measures inputs and outputs of processes;
- identify risks and implement measures to eliminate, reduce or control these risks;
- Apply measures to eliminate the cause of non-conforming entries or exits;
- Apply measures to prevent the use or delivery of non-conforming entries or outputs until the remedial action is applied;
- Determine how performance will be measured against goals and how it will reduce variance;
- Identify better ways to achieve the objectives of the process and improve its effectiveness;
- Determine whether the objectives of the processes remain relevant to the needs of the stakeholders and, if necessary, change them.

The main steps in applying this principle are the following:

1. Defining the process of obtaining the desired result;
2. Identify and measure inputs and outputs of the process;
3. Identifying process interfaces with organization functions;
4. Assess the possible risks, consequences and impact of processes on customers, suppliers and other stakeholders;
5. Establish a clear responsibility and authority in managing the process;
6. Identification of internal and external clients, suppliers and all stakeholders;
7. Process design, process steps, activities, information flows, control measures, training needs, equipment, methods, information, materials and other resources are taken into account to achieve the desired result.

The main benefits of applying this principle can be reduced to:

- Reduced costs and shorter cycles for resource efficiency;
- Improved, consistent, predictable and predictable results
- Carefully targeted and prioritized improvement opportunities.

Principle 5: Systematic approach to management. Identifying, understanding and managing a system of interrelated processes for a particular goal will improve the efficiency and effectiveness of your organization. A system is an ordered set of ideas, principles and theories or a chain of operations that produces concrete results. To be a chain of operations, they have to work together in a regular and regular manner. Transferring the system approach to management means managing the organization as a process system so that all processes fit together, inputs and outputs are connected, resources feed processes, performance monitored, sensors transmit information that determines changes in performance, and all component parts to work together to achieve the organization's goals.

This vision of a system clearly implies that a system is dynamic and not static at all. The system is not a random collection of elements, procedures and tasks, but a set of interconnected processes. The system



approach recognizes that the behaviour of the system as a whole has the effect, to a greater or lesser extent, of the behaviour of any part of the system. Even though individual processes are working well, it is not necessarily and necessarily that the system as a whole performs just as well.

What determines the correct or incorrect functioning of a system is the interaction between its components or processes, and not the single actions of a component or a process.

An organization that applies the principle of systemic approach is one in which people:

- Define the system by identifying or developing processes that affect a particular goal;
- Structure the system to achieve the goal in the most efficient way;
- I understand the interdependencies between system processes;
- It takes into account the needs of all stakeholders when making decisions or measures;
- I understand the impact of their actions and decisions on the objectives of the organization and the processes that provide results that are intended to meet these objectives;
- Set up resource constraints before moving on to action.

The main steps you follow in applying this principle are:

1. Define the system by identifying or creating processes that aim at achieving a particular goal.
2. Structuring the system to achieve the goal in the most efficient way.
3. Understanding interdependencies between system processes.
4. Continuous improvement of the system through measurement and evaluation.
5. Estimate resource requirements and constraints on them before action.

The main benefits of applying this principle are:

- Integrate and align the processes that will achieve the desired results most efficiently;
- Ability to focus efforts on key processes;
- Ensuring stakeholders' confidence in the organization's consistency, effectiveness and efficiency.

Principle 6: Continuous improvement. Continuous improvement must be a permanent goal of the organization. This means that all members of the organization should continually question the performance of the organization and look for ways to reduce potential variations, continually inquire about their own working methods and look for better ways to run the activities, to constantly question their own goals and to look for new ones that improve the organization's capacity.

Performance, methods and goals are the three key areas where improvement is needed for organizations to achieve and maintain success. Improvements will be seen from three perspectives: improving through better control, improving through better use of resources and improving through a better understanding of the needs of all stakeholders. ISO 9000: 2000 defines continuous improvement as "a repetitive activity aimed at increasing the capacity to meet requirements". Therefore, improvement is relative to a time interval. If the improvement is repeated once a week, once a month, once a year or even every 5 years, it can be considered as "recurring", so repetitive.

Improvement can be geared to specific features, specific activities, specific products, processes or organizations. When targeted to a specific feature, it may involve reducing the variance of the evaluated feature. When targeted to specific products, it may involve major changes to them (for example, when updating a



product). When directed toward the organization, it can involve major reorganization or reengineering processes.

Regardless of the level at which it is addressed, continuous improvement is about improving efficiency and effectiveness.

An organization that applies the principles of continuous improvement will be one in which employees:

- I see in the continuous improvement of products, processes and systems an objective of every employee of the organization;
- Apply basic concepts of improvement from the perspective of progress-oriented improvement and gradual improvement;
- It uses periodic evaluations in the light of the criteria of excellence established to identify potential areas for improvement;
- Continuously improve the efficiency and effectiveness of all processes;
- Promotes activities based on prevention;
- Provide adequate training and education to each employee of the organization, oriented towards the methods and tools of continuous improvement;
- Set up measures and objectives to guide and track improvements;
- I recognize both the improvement process and its results.

The main steps of applying this principle are:

1. Transform the continuous improvement of products, processes and systems into a target of every employee of the firm.
2. Apply the basic concepts of progressive and innovative improvement.
3. Use periodic assessments based on the criteria of excellence established to identify areas of potential improvement.
4. Continuously improve the efficiency and effectiveness of all processes.
5. Promoting prevention-based activities.
6. Provide adequate education and training to each employee for continuous improvement methods and tools such as the Plan-Do-Check-Act cycle, problem solving, reengineering, and innovation.
7. Establishing measures and objectives for guiding and pursuing improvement.
8. Recognizer improvident.

The main benefits of applying this principle are:

- Advantage of performance, achieved by improving organizational capabilities;
- Aligning improvement activities at all levels with the strategic intent of the organization;
- Implement flexibility to react quickly to opportunities.

Principle 7: The factual approach to decisions. Effective decisions are based on data and information analysis. The facts are derived from the observations made by qualified personnel using devices whose capacity and abilities are recognized. A fact-based approach to the decision-making process leads to the determination of certain actions to be taken. Faith-based decision-making requires reliable mechanisms to collect these facts, such as measurement systems. A valuable method of interpreting facts and providing information in a form that



allows for durable and sound decisions is also needed.

The factual approach leads to the evaluation of activities based on facts, rather than on opinions or emotions. This rather means using statistical techniques to reveal information about a process rather than reacting to the variance that is an inherent characteristic of the system. However, used in isolation, this principle may be dangerous.

The over-dimensioning by some managers of objectives for situations, processes or products tends to generate situations that individuals do not have the power to control.

A manager can calculate the number of projects a design engineer finishes in a given time. The number is a certain fact, but making a decision about the designer's performance on this basis is incorrect, as this does not say anything about the quality of the projects.

Each project is different, so the time allotted for each one varies. Each customer is different, so the time needed to determine the needs of everyone varies.

Setting the goal of finalizing a number of projects in a certain period of time could lead to a hurried project and, implicitly, to the occurrence and generation of errors, only to achieve a meaningless end goal. Therefore, it is necessary to address this issue differently.

First, it will be determined what decision is to be made, and then determining what facts (actions, processes, and materials) are needed to make the decision. When these are known, determine how they will be obtained and what methods should be used to obtain them.

The steps taken will be upstream, starting from the decision that the firm, the manager, or the employee has to take, to get the necessary information and not downstream from the information to a decision that has to be made based on them. This provides a purpose for collecting data. Without purpose, collecting data is a waste of resources, as data is not collected under the pretext that it could become useful in making a decision.

An organization that applies the principle of fact-based approach is one in which people:

- Performs measurements and collects data and information relevant to the company's objectives;
- Ensures that the data and information are sufficiently accurate, reliable and accessible;
- Analyses data and information using valid methods;
- I understand the value of the appropriate statistical techniques;
- I take decisions and act on the results of balanced logical analysis of experience and intuition.

The main steps of applying this principle are:

1. Taking action and collecting data and information relevant to the company's objectives.
2. Ensure that data and information are accurate, reliable and accessible.
3. Use of accurate and valid methods of data and information analysis.
4. Understanding the value of appropriate and appropriate statistical techniques;
5. Making decisions and measures based on results of balanced logical analysis of experience and intuition.

Among the most important benefits of applying this principle are:

- Making informed decisions;
- Ability to demonstrate the effectiveness of previous decisions by referring to factual records;
- Increased ability to review, challenge and change opinions, opinions, and decisions.



Principle 8: Mutually beneficial relationships with suppliers. An organization and its suppliers are interdependent, and a mutually beneficial relationship increases both the ability to create plus value. The principle of customer orientation has drawn attention to the fact that organizations depend on their customers. It is also true that organizations depend on their suppliers.

Suppliers provide the materials, resources, and often many services that were previously provided through outsourcing. XXI century organizations are more dependent on their suppliers than they were in the past. The move to lower costs and the highest performance has led many organizations to consider the economy if they continue to provide their own support services. Thus, it is recognized that organizations were trying to be good at everything, rather than being good only to their main business. This recognition has led to the strengthening of single-function organizations serving a large number of clients on a reciprocal basis. However, there is still one reason that has led to strong relationships with suppliers, namely, the dramatic change in the goods and services market over the past 100 years.

Prior to 1920, most of the companies focused on production in the hope that a quality product would sell itself. Between 1920 and 1950, many firms focused on selling what they could produce, whether or not the customer needed that product. From 1950 to 1990, the market has changed, moving from a vendor market to a buyer market, once customers have become more demanding and firms have begun to focus on identifying customer needs and manufacturing products and services to satisfy these needs.

Over the past 25 years, customer orientation has advanced, focusing on establishing and maintaining relationships with both customers and suppliers. From a simple exchange between buyer and seller, it has evolved into strategic alliances and partnerships that have eliminated inventory, packing and, most importantly, reduced the costs of acquiring new customers and suppliers, ultimately benefiting both sides.

For the client, the supplier is more inclined to keep his promises, as the relationship ensures future orders. There is more empathy, and the client gets to look at both supplier and vice versa. There is also more generosity that links the two entities more closely and, ultimately, there is confidence that actively maintains the partnership. In this situation, contradictory relationships and single transactions occurring when either party may leave the business will be absent. Partnerships will also encourage a better set of post-sale actions and a stronger customer orientation across the organization.

An organization that applies the principle of mutually beneficial relationships with suppliers will be one where people:

- Identifies and selects key providers according to their ability to meet the requirements without compromising quality;
- Establish relationships with suppliers that balance short-term gains but with a long-term vision for the organization and society in general;
- Create clear and open communication;
- Initiates jointly, develop and improve products and processes;
- Establish together a clear understanding of customer needs;
- Exchange information and future plans;
- I recognize the improvements and achievements at the supplier level.



The main steps of applying this principle are:

1. Identify and select key suppliers.
2. Establishing relationships with the supplier to balance short-term gains with long-term considerations for the organization and society in general.
3. Creating clear and open communication.
4. Initiating joint development and improvement of products and processes.
5. Establishing a clear understanding of customer needs.
6. Exchange of information, future plans, recognition of improvement activities and supplier achievements.

The main benefits of applying this principle include:

- Increasing the capacity of both parties to create value;
- Flexibility and rapidity to respond jointly to market changes or customer requirements and expectations;
- Cost and resource optimization.

Conclusion

The eight principles listed above can be used to validate process design, validate decisions, audit and process level, and managers and employees can check these processes and ask:

1. Where, in this process, is customer orientation?
2. Where, in this process, are leadership, guiding policies, measurable objectives and the environment motivating employees to achieve these goals?
3. Where, in this process, is the involvement of people in process design, decision-making, monitoring, measuring and improving performance?
4. Where, in this process, was the procedural approach applied to achieving these objectives?
5. Where, in this process, is the system approach to interface management, performance optimization, or bottleneck removal?
6. Where, in this process, are the facts correlated and transmitted to decision-makers?
7. Where, in this process, there is continuous improvement in performance, efficiency and effectiveness?
8. Where, in this process, a mutually beneficial relationship with suppliers has been established.

The answers to these questions can position the management team to make a decision or another according to the factors that can contribute to increasing performance, assuming a catalyst role in the company.

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