Abstract

In order to create a successful quality management system it is inevitable to balance processes, people and technologies. The paper is concerned with the problems of people involvement and their competence in quality management systems.

Key words

Quality management principles, People involvement factors, Leadership, Organizational culture, Competence, Creativity

Introduction

Although involvement of people is vital for the efficient implementation of a quality management system, its consequences are sometimes underestimated forgetting that people at all levels are the essence of every organisation and their full involvement enables their abilities to be used for the organisation’s benefit. Whereas processes and technologies are usually optimally designed and guaranteed, people sometimes represent weak spots and this is why they deserve our increased attention. Although the ISO 9000: 2005 standard considers in its eight quality management principles the competence and involvement of people as being inevitable for the efficiency and effectiveness of the system operation, an increased awareness of human factors in quality management and optimized involvement of all people engaged undoubtedly leads to an improvement in the ability to meet requirements and ultimately to customer satisfaction.

Quality management principles from a human perspective

First of all, it should be understood that every quality management principle represents a comprehensive and fundamental rule or belief for leading and operating an organisation...
which is aimed at the continual improvement of performance over the long term by focusing on customers while addressing the needs of all other stakeholders. By applying the following eight quality management principles organisations will produce benefits for customers, owners, people, suppliers, local communities and society at large.

**Principle 1 – Customer focus**

*Organisations depend on their customers and therefore should understand current and future customer needs, meet customer requirements and strive to exceed customer expectations.*

**Application of this principle leads to the following actions:**

- breaking down barriers between customers and people within the organisation to improve relationships and communication;
- improvement of understanding of customer needs and expectations for products, delivery, price, dependability, after sale services etc.;
- improvement of understanding of customer needs and expectations by people not directly dealing with customers and so understanding the value chain operating within the organisation;
- measuring and communicating results of customer satisfaction and so improving customer satisfaction and related processes.

**Beneficial applications of this principle include:**

- improvement of policy and strategy formulation;
- aligning relevant goals and targets with customer needs and expectations;
- operational management improvement with the aim to meet customer needs and customer satisfaction;
- improvement of human resources management by ensuring people that they have the competence required to satisfy the customer needs.

**Principle 2 – Leadership**

*Leaders establish unity of purpose and direction of the organisation. They should create and maintain the internal environment in which people become fully involved in achieving the organisation’s objectives.*

**Application of this principle leads to the following actions:**

- establishing a clear vision of the organisation’s future a sharing it with the people;
- establishing shared values and ethical role models with all people of the organisation, understanding and responding to changes in the external environment and explaining these changes to all affected people;
- being proactive and leading the people of the organisation by example, balancing the needs of all stakeholders including customers, owners, employees, suppliers, local communities and society at large;
- educating, training and coaching people;
- providing people with the required resources a freedom to act with responsibility and accountability;
- promoting open and honest communication among people;
- inspiring, encouraging and recognizing people’s contribution;
- building trust and eliminating fear;
- sharing the setting of challenging goals and targets;
- implementing strategy to achieve these goals and targets.
Beneficial applications of this principle include:
- establishing and communicating a clear vision of the organisation’s future and explanation of its policy, future and mission;
- translation of the organisation’s vision into objectives and measurable goals and targets;
- reviewing and improving the processes of the organisation;
- providing role models for people within the organisation.

Principle 3 – Involvement of people
People at all levels are the essence of an organisation and their full involvement enables their abilities to be used for the organisation’s benefit.

Application of this principle leads to the following actions:
- active looking for opportunities to enhance their competencies, knowledge and experience;
- being innovative and creative in furthering the organisation’s objectives;
- focusing on the creation of value for customers;
- feeling empowered to accept ownership and responsibility to solve problems;
- active seeking opportunities to make improvements;
- active sharing knowledge and experience in teams and groups.

Beneficial applications of this principle include:
- creation of peoples’ behaviour and believe consistent with the organisation’s policies and strategies;
- people sharing ownership of the organisation’s goals;
- people taking appropriate decisions and improving processes they are involved in;
- people satisfaction with their jobs, their active involvement in their personal growth and development and being enthusiastic and proud to be part of the organisation.

Principle 4 – Process approach
A desired result is achieved more efficiently when related resources and activities are managed as a process.

Application of this principle leads to the following actions:
- identifying internal and external customers, suppliers and other stakeholders of the processes;
- determination of people defining processes they are responsible for to achieve desired results;
- determination of clear responsibilities for people, their authority and accountability for managing processes;
- nomination of people identifying interfaces of processes interrelated with other processes and functions of the organisation;
- nomination of people identifying and measuring inputs and outputs of various processes;
- nomination of people evaluating possible risks, consequences and impacts of processes on customers, suppliers and other stakeholders of processes;
- when designing processes, considering process steps, activities, flows, control measures, training needs, equipment, methods, information, materials and other resources to achieve the desired results.

Beneficial applications of this principle include:
- better assessment of more predictable results, better use of resources, shorter cycle times and lower costs;
- aligning goals and targets across functions of the organisation in an integrated way;
– increasing sense of responsibility, lowering costs, preventing errors, reducing cycle times and providing more predictable outputs;
– people understanding of their positions in the organisation and in its processes.

**Principle 5 – System approach to management**

*Identifying, understanding and managing a system of interrelated processes for a given objective improves the organization’s effectiveness and efficiency.*

**Application of this principle leads to the following actions:**
– better understanding of interdependencies among processes creating the system;
– structuring the system to achieve overall organisational objectives in the most effective and efficient way;
– development of the system through identification and development of processes that affect organizational objectives;
– support of people continually improving the system through measurements and evaluations.

**Beneficial applications of this principle include:**
– creation of an organization-wide understanding of how the it can succeed;
– understanding that individual, functional and process goals are intended to support overall organization goals;
– managing, aligning and improving individual activities and processes with the aim to support the system as a whole;
– providing a better understanding of roles and responsibilities for achieving system-wide objectives, reducing cross functional barriers and improving teamworks.

**Principle 6 – Continual improvement**

*Continual improvement should be a permanent objective of the organization.*

**Application of this principle leads to the following actions:**
– continual improvement of products, processes and systems becomes an objective for every individual in the organization;
– introduction of the basic concepts of incremental and breakthrough improvements;
– continual monitoring and measuring of areas suitable for potential improvements;
– continual improvement of the efficiency and effectiveness of all processes;
– promotion of prevention based activities;
– provision of appropriate education and training to every member of the organization, specifically in the methods and tools of continual improvement such as the Plan-Do-Check-Act cycle, problem solving, process re-engineering and process innovation;
– establishing measures and goals to guide and track improvements;
– recognizing improvements and evidence of success.

**Beneficial applications of this principle include:**
– achievement of a culture of continual improvement as a source of competitive advantage;
– setting realistic and challenging improvement goals and providing resources to achieve them;
– continual improvement of effectiveness and efficiency of processes across the organization;
– involvement of all people in the organization in continual improvement methods, tools, opportunities, and their encouragement to improve products, processes and systems.
Principle 7 – Factual approach to decision making
*Effective decisions are based on the analysis of data and information.*

**Application of this principle leads to the following actions:**
- agreeing on objectives, taking measurements, collecting data and information relevant to the objective;
- ensuring data and information are sufficiently accurate, reliable and accessible;
- analysing data and information using valid methods;
- understanding the value of appropriate statistical techniques;
- providing results of analysis in a form that can be understood and acted upon;
- making decisions and taking actions based on the results of logical analysis balanced with experience and intuition.

**Beneficial applications of this principle include:**
- developing strategies based on relevant data and information, being realistic and understood by the people in the organisation;
- using relevant data and information to set realistic and challenging goals and targets;
- using data and information to improve understanding of process and system performance and system performance to guide improvements and prevent future problems;
- increasing competence of people through using data to improve processes and operations.

Principle 8 – Mutually beneficial supplier relationships
*An organization and its suppliers are interdependent and mutually beneficial relationship enhances the ability of both to create value.*

**Application of this principle leads to the following actions:**
- involving people within the organization in identifying and selecting key suppliers and thereby using their knowledge and experience;
- establishing open, clear and honest two way communication with suppliers to exchange information in order to jointly understand each other’s needs and capabilities;
- involving individuals and groups at the supplier organization with people in one’s own organization in teams undertaking joint development and improvement of products and processes;
- recognizing and rewarding efforts and achievements of individuals within the supplier organization;
- establishing and building relationships with suppliers balancing short-term gains with long-term considerations for the organization, its people and society at large.

**Beneficial applications of this principle include:**
- creation of a competitive advantage through development of strategic relationships with suppliers;
- establishing more challenging goals and targets through early involvement and participation of suppliers and people in the organization;
- creating and managing relationships between suppliers and the people in the organization to ensure reliable, on-time, defect-free delivery of supplies;
- improving supplier capabilities through supplier training and joint improvement methods.

**Human factors**

The foregoing principles of quality management indicate a number of human factors that need to be addressed when developing a quality management system. To increase
participation and competence of the people in organization the following three groups of human factors should be considered:

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Let us briefly characterize these factors.

**Leadership factors**

**Leadership** is one of the eight quality management principles and is vital for successful implementation of a quality management system. Without effective and efficient leadership it will be extremely unlikely that any programme will be implemented satisfactorily. Leaders establish unity of purpose and direction for an organisation, create and maintain the internal environment in which people can become fully involved, enable people to follow the path to achievement of organisational objectives, develop a vision and mission of their company, align and coordinate the peoples’ efforts with organisational goals and common purpose and strategy. Effective leaders establish values that are important to the organization – these values form a central part of the organization’s culture.

**Organizational culture** is the pattern of beliefs and values that have developed during the organization’s history and which manifests itself in the behaviour of its members. Beliefs and values develop from people observing what leaders pay attention to and how leaders react to critical incidents. Organizational culture affects organizational performance through aspects such as relationships among people, the speed with which it executes and its customer relationship.

**Change management** enables an organization to move from one organizational state to another. The ability to make a change in an organization is influenced by the attitudes and behaviours of its people. Change management enables an organization to identify key issues, predict barriers to change and so minimize organizational disruption and create organizational structure that is aligned with new strategies and processes.

**Knowledge management** makes an integral part of the flow, storage and retrieval of information and belongs to the leadership strategy. It is now recognized that knowledge makes an equally important business resource alongside time, money and people.

**Competence factors**

Organizations rely on people who should be fully able to operate the organization`s processes. This ability to contribute is evidence of competence and requires processes to achieve, maintain and develop the required level of knowledge and capabilities. It is natural that competence is to be verified and supported by tests.
The first stage of a competence management process is **recruitment**, i.e. sourcing, screening and selecting people for their positions in an organization. Managers can undertake some part of the recruitment process but larger organizations often use professional recruiters. The key benefit of this successful procedure is that it reduces the employee turnover, reduces the corresponding costs, increases the organization stability and increases a good reputation of the organization.

All employees including suppliers and interested participants should pass the processes of **learning and education** in order to enable individuals to maintain their own competence, improve their staff morale and job satisfaction, increase their retention and competitiveness.

**Competence** of individuals is important for performing tasks in the workplace and achieve required results. Competence results from a combination of knowledge, skills and attitudes and leads to behaviour and actions by individuals carrying out their activities. An organization which employs competent individuals is able to meet its targets more consistently and with less reworking on its products and services. As a result this leads to enhanced customer satisfaction, more reliable products and generally at a lower cost.

**Creativity and innovation** are the processes of producing new ideas and their realization. Their key benefits inside the organization are the improvement of existing processes and the development of new products and services for the market and for tomorrow’s customers and thereby creating competitive advantage in the market place.

**People involvement factors**

People involvement is the basic and indispensable condition of any quality system realization. To make the best use of people we need to ensure that they are engaged with the processes of the organization through processes designed to make the most of their competence.

In order to involve people we need to effectively **communicate** the organization’s expectation to them and listen to their views on the current direction and ways of working. Communication can occur through different media (verbal or non-verbal) with the basic aim: to ensure that everyone inside the organization is working for the same objective. It avoids misunderstanding and so enables tasks to be carried out more easily.

To effective forms of communication and to ways of involving people in the work of organization belong **networking and collaboration**. There are two principle types of networks, viz. the open network suited to finding opportunities and conceptual solutions, and closed network opened only for small groups of familiar people. Both these types of networks have their advantages and drawbacks, but they both lead to collaboration. Applying networking to a quality management system improves the flow of information and knowledge among people.

Any system of quality management is generally related to the whole organization and also to cooperating organizations. This is why it requires **teamwork** as a form of collaboration with individuals working together on a shared task in a mutually beneficial relationship leading to enhanced and assured quality in products and services. Teamwork helps to optimize the knowledge and skills required of people and so teamwork increases the probability that quality objectives will be achieved.

Teamwork requires individuals to work in a **disciplined fashion** and sometimes suppresses their own objectives to meet team goals. This naturally requires individual self discipline or discipline imposed from outside such as by the policies of the quality management system. Discipline has to be balanced with freedom to choose and experiment. It relies
on communication to enable individuals to understand where they need to follow procedures and where they have freedom of choice.

One aspect of people involvement when teams and individuals have demonstrated competence in achieving organizational objectives is by managers within the organization allowing them authority to organize their own work. **Empowerment** is the process that provides employees with the authority and ability to make decisions about their work. Employee empowerment helps employees serve customers at the level of the organization where the customer interface exists and where also **responsibility** of people is questioned.

Where individuals and teams have been involved in successful work for the benefit of the organization, it helps developing an effective culture when the organization **recognizes and rewards** their contribution. This leads to greater motivation, loyalty and effort from recognized employees along with increased performance, thereby improving a competitive advantage.

**Management of competence and people involvement**

The eight foregoing management principles indicate the importance of people involvement and the need of their competence. This is why organizations should establish, document, implement and maintain processes for competence acquisition and people involvement and continually improve their effectiveness.

The **competence acquisition process** aims at ensuring that the appropriate competence is developed with regard to the needs of the business activities. This involves managing, developing and maintaining the organisation’s ability to achieve its objectives. At the same time the organization should create the necessary conditions for participation and involvement of all employees including stakeholders in the process. It should be emphasized that the involvement of people is not only the key to the success of the quality management system but of the whole organization. At the same time it must be clear that the competence acquisition process is not a simple procedure and so it must be systematically managed. Nevertheless it finally brings a competitive advantage when recruiting new employees and increasing their satisfaction. It also brings for them new opportunities when selecting jobs.

The competence acquisition process should commence with the analysis of competence needs by using inputs such as business plans, policy and guidelines from interested parties. The existing competence for each employee is thereby mapped out and this creates the knowledge of existing competence and a record of existing competence for the organization. Identified competence gaps are then recorded and competence acquisition plans are created for every employee, realized and evaluated. A record of any successive corrective and preventive action is then created and maintained.

In order to ensure management system effectiveness top management must make effective choices of **people and their involvement** in various activities. Whether it be an individual or group, the right involvement can help generating ideas, form consensus and smooth the way for implementing action plans. When used in combination with problem solving, decision making and project management processes, effective people involvement is a powerful tool for continual improvement. At the same time it should be understood that the people involvement process should be an integral part of the whole process approach and should start from identification of personal or group objectives for planned activities, then should proceed to identification of persons to be involved, their selection, effective communication with them and finally should be closed with evaluation of their outcomes.
Conclusions

Many years lasting experiences with the implementation and realization of quality management systems prove that numerous failures were due to insufficient engagement of managers and other people in organizations and by the underestimation of human factors in organizations. Any successful functioning of every quality management system therefore must create a balance among processes and engaged people and so offer an environment for possible changes.

The contribution was written with Institutional project N. 1/0290/09 Integrated Communication of the Quality-Oriented Organisation and Institutional project Distance Education in the Quality of production, customer protection and market surveillance