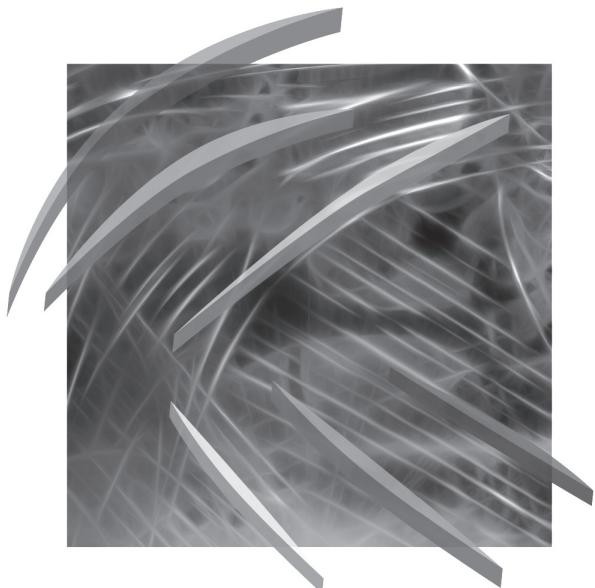


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**QUALITY MANAGEMENT SYSTEM PROPOSAL
FOR COMPLEX ORGANIZATIONS**

Abstract: This paper presents models of Quality Management Systems that are suitable for complex organizations. Normative and excellence Quality Management System solutions are analyzed and a comparison is made. Several comments regarding ISO 9001:2008 international standard are presented in this paper. Finally, a Quality Management System is implemented within a complex organization, Teaha Management Consulting – JW Marriott Grand Offices, Bucharest, Romania and several conclusions and future work are presented.

Key words: quality, management systems, complex organizations, international standards.

1. Introduction

A management system helps a complex organization to achieve its goals through a number of strategies, including process optimization, management focus and disciplined management thinking. According to BSI Group [<http://www.bsigroup.com/en/Assessment-and-certification-services/management-systems/at-a-glance/What-are-Management-Systems/>], a management system is “a proven framework for managing and continually improving your organization’s policies, procedures and processes”. Another definition [Constantinescu 2005] refers to “the framework used to establish the policies and objectives of the organization and the way to achieve them”. A management system can be viewed as a PDCA framework (Plan, Do, Check, Act). A complete management system would include an assignment of personal responsibility and a schedule for activities to be completed, as well as auditing tools to implement corrective actions in addition to scheduled activities, creating an upward spiral of continuous improvement.

According to D.I. Levine [2010], implementing a quality management system that conforms to ISO 9001 entails documenting operating procedures, training, internal auditing, and corrective action procedures.

The most implemented management systems within organizations are: Quality Management System according to ISO 9001:2008 international standard, Information Security Management System according to ISO 27001:2006, Environmental Management System according to ISO 14001:2007, SA8000 Social Accountability. Management systems, information sharing, benchmarking, team working, strategic vision, working to the highest quality principles are necessary conditions for complex organizations business success. In order to provide reliance to their customers and manufacturers, organizations should implement and certify, through a certification body, a Quality Management System according to ISO 9001:2008 international standard. This ISO standard provides requirements that an organization should fulfil in order to be certified. By such a certified management system, the organization expresses its orientation on quality and the fact that the customer is in the middle of the business. An organization that applies the quality management principles should fulfil the customers' requirements and surpass customers' expectations.

2. Quality Management Systems – QMS

There are two important types of Quality Management Systems (QMS): Normative Quality Management Systems models and Organization-Business Excellence Model. In the following sections, these models suitable for complex organizations are analyzed.

2.1. Normative Quality Management Systems

These management systems are implemented and certified according to a normative document (usually an international standard, a settlement). In order to certify such a management system within a complex organization, a certification body must verify if the company fulfils the requirements of the normative document. The conformity analysis is done by external auditors and an annual reassessment is a requirement of the certification body. If we refer to the international standard ISO 9001:2008, as a normative document, an implementation process of a Quality Management System includes the following elements:

- organizational structure,
- responsibilities,
- processes,
- resources,
- customer satisfaction,
- continuous improvement.

In order to implement and to certify, through a certification body, a quality management system, an organization should prepare the following main documentation:

- quality policy,

- quality objectives,
- documented procedures according to ISO 9001:2008 international standard,
- documented records according to ISO 9001:2008 international standard,
- quality manual.

Quality policy is the top management position regarding quality in the organization. It is a concise document that defines organizational goals and objectives with regard to quality and an undertaking to drive continuous improvement throughout the organization's activities. A quality policy is a good tool for decentralization within an organization. It needs to be reviewed at least annually and must be signed by a senior manager in order to demonstrate management commitment to its contents.

Quality objectives define the results the organization should obtain regarding quality domain. They should be part of the organizational objectives and should be derived up to departmental level.

A procedure (Figure 1) is the way to describe a process. An organization can be viewed as a complex system of interworked processes. According to international standards, the business approach based on processes is both a principle – a desired result is obtained efficiently if the resources and activities are coordinated as a process (ISO 9000:2006) and a ISO 9001:2008 requirement – the organization should a) determine the Quality Management System processes within the organization b) determine how these processes interact.

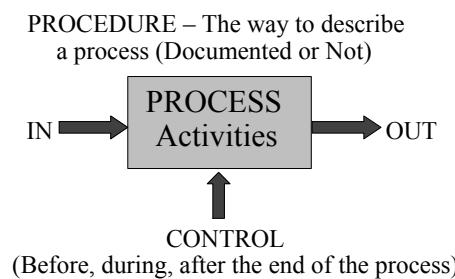


Figure 1. The approach based on processes

Source: [Purcarea, Tiganoaia, Petrea 2011]

In order to define correctly a process, the steps below should be followed:

- the input of the process in quantitative terms should be known,
- the output(results) of the process in quantitative terms should be known,
- international standards requirements regarding the process should be known,
- the steps and activities of the process should be defined
- the necessary documentation required by the process should be available,
- a process owner should be named (he/she has the authority regarding all the process activities),

- if the process has sub-processes, it may be necessary to have an owner for each set of activities,
- all the departments in which the process takes place should be known exactly (for multi-departmental processes).

The quality manual should include both information about Quality Management System and data regarding the organization. Information about the QMS:

- quality manual applicable domain,
- exclusions and their justifications,
- quality policy,
- quality objectives,
- procedures according to international standard ISO 9001:2008,
- processes description and how they interact.

Data regarding the organization:

- business short description,
- name of the organization and localization,
- history of the organization,
- organizational structure,
- communication within the organization.

The advantages of normative Quality Management Systems are:

- they can be certified by a national or international certification body,
- all organizational processes are checked by internal or external audit.

However, a normative QMS has some disadvantages:

- it must be documented,
- it must be checked periodically by internal and external audit,
- training for human resources is necessary.

2.2. Organization – Business Excellence Model

This Quality Management System is not a normative one and treats the organization as a Business Excellence Model. QMS is developed on an informative structure which consists of a set of correlative criterions. One part of these criterions represents management processes and another part consists of results the organization should obtain. Business excellence model is based on the Total Quality Management (TQM) principles [Constantinescu 2005]:

- leadership,
- continuous improvement,
- orientation on customer,
- process approach,
- human resources involvement,
- partnerships development,
- social responsibility,
- strategic vision.

Total Quality Management refers to a Quality Management System in order to implement Total Quality (quality in all departments of an organization) strategy for achieving the objective: Organization-Business Excellence Model.

D. Constantinescu [2005] shows that, according to French literature, Total Quality (TQ) represents a set of principles and methods applied in all departments of an organization in order to improve:

- a) quality of the organization functions,
- b) objectives quality,
- c) services/products quality.

According to [Constantinescu 2005], in American literature, TQM means engagement for excellence – to be the best in all organizational functions and it can be achieved by changing organizational culture through leadership.

The Quality Management System implementation degree is verified by an evaluation as a consequence of a contest participation. Examples of international contests: European Quality Award, Malcolm Baldridge National Quality Award for United States of America.

Below, European Foundation for Quality Management (EFQM) excellence criterions are briefly presented [Constantinescu 2005]:

- leadership,
- human resources,
- strategies and policies,
- partnerships,
- business processes,
- human resources satisfaction,
- customers satisfaction,
- social responsibility,
- business results.

The advantages of an excellence model are:

- prestige for the organization,
- a powerful marketing tool,
- no documentation.

But, such a model has some disadvantages:

- financial resources for candidate-ship are required,
- quantitative results are needed in order to demonstrate excellence,
- the evaluation of the organization is made by indicators, but managerial actions are not mentioned.

3. QMS within a complex organization – case study

In this section, a case study regarding the implementation of a Quality Management System according to international standards is done. ISO 9001:2008 international standard was chosen as a normative document. A QMS proposal was tested in

a complex organization, Teaha Management Consulting, JW Marriott Grand Offices, Bucharest, Romania, <http://www.teaha.ro>. The results of such a QMS are presented in this case study.

3.1. Teaha Management Consulting company presentation

Teaha Management Consulting (TMC) is the biggest accounting company with 100% Romanian capital. It was founded in 1997 and today the company has an impressive market share. TMC has subsidiaries in Sibiu, Brasov, Timisoara, Cluj and Chisinau and over 100 employees and partners. Teaha Management Consulting is Auditor of the German Businessmen Club in Romania and, from 2010, a member of MGI. Among the services of Teaha Management Consulting, we can mention: accounting, consulting, audit services, IT services and translations. TMC has over 100 customers from countries such as: Germany, Austria, Japan, India, Switzerland and Romania.

3.2. Quality Management System proposal for Teaha Management Consulting

“Quality is not all that matters, but all is nothing without quality.”(Peters and Waterman)

Teaha Management Consulting expresses, in strategic vision, its orientation on satisfying the customers' requirements and expectations. TMC focuses on the implementation and certification, through a certification body, of a Quality Management System, according to ISO 9001:2008 international standard.

The QMS proposal (the interaction of processes), according to ISO 9001:2008, implemented and tested in Teaha Management Consulting can be shown in Figure 2.

The organization is viewed as a complex system of processes that interact with each other (the process approach is used). The model proposed fulfils the ISO 9001:2008 requirements and has some processes added: social responsibility, leadership, strategies and policies, partnerships. The company maintains documentation regarding the QMS (documented procedures, documented records, quality policy, quality objectives, quality manual). The normative QMS implemented at Teaha Management Consulting is a good marketing tool and it represents the main step to pass to a non-descriptive model and to achieve the objective: Organization-Business Excellence Model.

The **results** of Teaha Management Consulting, as a consequence of the implementation of a QMS according to ISO 9001:2008, are presented here in brief:

- customer satisfaction has increased,
- competitiveness,
- reliance provided to its customers and partners,
- the company image has been improved,
- human resources involvement,
- a good control to all the processes in the company,

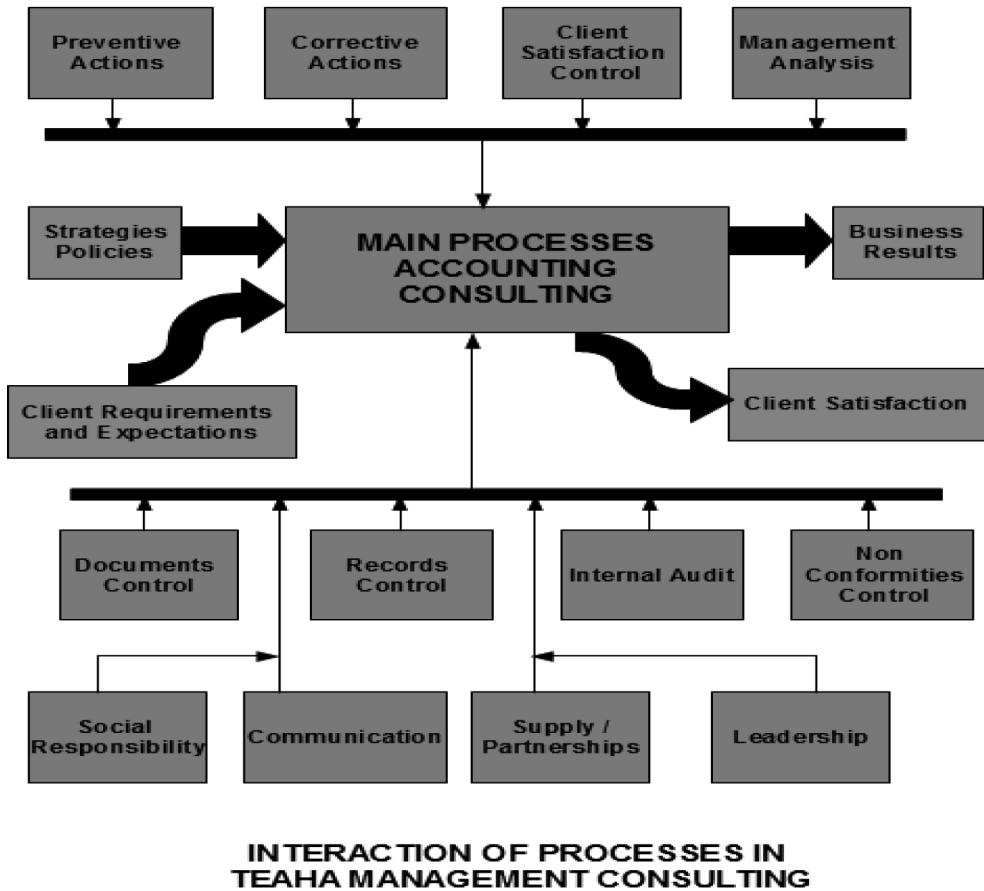


Figure 2. The processes interaction at Teaha Management Consulting – proposal

Source: own elaboration.

- costs reduction,
- achieve continual improvement.

By using a certified Quality Management System, Teaha Management Consulting is able to continually renew its mission, strategies, operations and service levels.

4. Conclusions, contributions and future work

The International Organization for Standardization has developed standards for QMS implementation within an organization. The companies can participate in a continuing certification process in order to demonstrate their compliance with the standard, which includes a requirement for planned improvement of the Quality Management

System. The Malcolm Baldrige National Quality Award is a competition to recognize excellence (top quality) in United States companies. The European Foundation for Quality Management's EFQM Excellence Model supports an award scheme for European companies. This paper presents quality management systems models suitable for a complex organization: normative and excellence quality management system solutions. A Quality Management System according to the international standard ISO 9001:2008 was implemented in a complex organization and several remarks were made. The case study was done at Teaha Management Consulting and the results were presented in this paper. As future work, an integrated management system (Quality Management System, according to ISO 9001:2008 and Information Security Management System, according to ISO 27001:2006) can be tested (through a case study) within an organization and a guide for the implementation of such an integrated management system can be developed. Moreover, a case study in which Total Quality Principles (Organization-Business Excellence Model) are applied in a complex company can be done.

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PROPOZYCJA SYSTEMU ZARZĄDZANIA JAKOŚCIĄ W ZŁOŻONYCH ORGANIZACJACH

Streszczenie: W artykule przedstawiono modele systemów zarządzania jakością odpowiednie dla złożonych organizacji. Przeanalizowano oraz porównano standardy i poziom rozwiązań tych systemów. W artykule zaprezentowano także uwagi dotyczące międzynarodowego standaru ISO 9001:2008. W części końcowej przedstawiono wdrożenie Systemu Zarządzania Jakością w wytypowanej organizacji Teaha Management Consulting – JW Marriott Grand Offices (Bukareszt, Rumunia), a także wnioski i kierunki dalszych badań.

Słowa kluczowe: jakość, systemy zarządzania, złożone organizacje, standardy międzynarodowe.