

Can Companies Achieve Their Quality Goals Using the Right Strategies?

Anca Madar

Nicoleta Andreea Neacsu

“Transilvania” University of Brasov, Romania

ancamadar@unitbv.ro

deea_@yahoo.com

Abstract

In the face of increased market competition due to the globalization of the economy and rapid innovation, organizations need to find new ways to maintain their market position and gain new markets. Among the various strategies that organizations can use to achieve this goal, such as marketing strategies, pricing, promotion, etc., are quality strategies. The authors of this paper wanted to exemplify how the implementation of a well-chosen quality strategy determined significant results in the activity of the analyzed company.

Key words: quality strategy, customer satisfaction, quality management, efficiency

J.E.L. classification: L15

1. Introduction

Strategic management involves the efficient exploitation of the organization's resources, the identification of means to overcome the competition, the orientation towards finding solutions to ensure the development of the company. One of the solutions that contributes to the company's development is the optimal identification of quality assurance solutions, as well as the choice of quality strategy that will bring the competitive advantage for your own organization.

Quality management has proven to be an efficient tool for increasing the competitiveness of companies in the market. The concept was developed and put into practice in the 60s of last century, but it is still widely used because it has proven its effectiveness, bringing benefits to both the organizations that implement it and their customers and society (Priede, 2012, p.1468).

In the face of globalization and rapid technological change, companies need to find new methods and apply various strategies to cope with increasing competition and changing customer needs.

In this paper, the authors made a presentation on how a quality strategy was implemented by a company from Brasov. First, the concepts of quality, quality management and quality strategy were presented, as well as the vision of these concepts in the literature, then a brief description of the analyzed company and a description of how the certification strategy was implemented at this company. The paper ends with the conclusions that the authors drew after analyzing the company.

2. Literature review

There are a number of definitions for the term quality, which would express a special meaning for each area. However, there are more commonly accepted models of definitions:

- suitable for use;
- in accordance with the requirements;
- a set of characteristics of an entity that gives it the ability to meet expressed or implied needs (SR ISO 8402: 1995);
- the extent to which the set of intrinsic characteristics meets the requirements;

- the ability of a set of intrinsic characteristics of a product, system or process to meet the requirements of the customer or other stakeholders.

Quality improvement must be found in all the objectives of the various functions and in the general objectives of the organization.

Total quality management is a management philosophy that orients to the client all the activities of the company in order to obtain long-term benefits. The total quality management ensures the satisfaction of the clients' requirements in the conditions of minimum costs, with the involvement of the entire staff of the company. Total quality management is based on the idea that nothing is perfect, which means that everything can be improved. In achieving total quality, all departments and all employees of the company are of equal importance. The ISO 9001: 2000 standard emphasizes TQM as a quality-oriented management system, introduced in all activities undertaken in organizational structures, based on a culture and philosophy of the organization in the spirit of quality, through the participation of all employees, ensuring long-term success by satisfying customers.

According to the ISO 9000: 2015 standard there are 7 principles of quality management. These are (Guzman *et al*, 2018, p.26): Customer orientation, Leadership, Staff commitment, Process-based approach, Improvement, Evidence-based decision making, Management of relations with stakeholders.

As Priede (2012, p.1468) says, Quality Management is an efficient tool for companies to improve competitiveness, in the conditions of globalization and increasing competition. This idea is also found in Sameh M Saad and Mohamed A Khamkham (2018, p.587), who state that the importance of quality management is due to its role in enabling organizations to achieve outstanding performance in the field of quality. The aspects that are improved by implementing a quality management system, as stated by Johannsen (2013, p.1000) are: enhancing the employees' culture, improving the operation performance and satisfying the customer's requirements.

In order to be able to stay on the market and exist in the future, companies must use new high-performance operational methods to ensure their success in the future, among the best known being Total Quality Management (Zakuan *et al*, 2010, p.188; Sinha & Dhall, 2018, p.4). As mentioned by Herzallah *et al* (2014, p.639), companies implement TQM to improve their business performance, by differentiating products and gaining a competitive position in the market.

For the successful implementation of TQM, an essential role is played by the organizational culture, which must be a culture appropriate to the quality. If the business environment is competitive, then the organizational culture is also oriented towards change. This change in organizational culture, as stated (Gimenez-Espin *et al*, 2013, p.680), changes the attitude of employees, which is an important factor in the successful implementation of TQM. The implementation of TQM involves an adequate coordination of procedures and methods which, in turn, will lead to a continuous improvement of all business units, in order to meet customer expectations.

For an organization, the strategy, originating in the military field, involves using all the resources of an organization (army) to achieve its goals (equivalent to military victories) by establishing long-term plans and objectives and how to achieve them in practice.

Strategy is the long-term horizon (purpose) and direction of an organization. It defines the uniqueness of the organization, how it differs from the competition. The strategy sets out the advantages of the organization by configuring resources in a competitive environment, to meet the needs of the market and the expectations of shareholders.

According to Madar (2020, p.41), quality strategies are a valuable tool that, chosen according to the objectives and possibilities of the organization, can lead to the realization of high quality products / services and at the same time to an increase of efficiency by reducing non-profit costs quality.

Quality strategies are considered in the literature as competitive strategies, because the mission of quality is to ensure organizations competitiveness in the market. The implementation of quality strategies aims at: satisfying the company's needs and customers' needs, establishing the level of quality characteristics, according to the conditions imposed by the competitiveness requirements, integration in the company's vision and mission, changing the staff mentality (Todoruț, 2007, p.84). These strategies indicate how resources are used to achieve the set quality objectives.

3. Company description

Located in Braşov, Romania, ICCO Group is a Romanian group of companies founded in 1990 based on a strong entrepreneurial spirit. The group has developed, through its companies, an extensive set of skills, which allow the realization of large projects, integrate specialized staff and provide terms and costs.

ICCO's mission is to contribute to the construction and development of its business and customer satisfaction through complex projects and professional services. The group owns a number of 22 companies in Romania and in 2 other countries: Hungary and Bulgaria, with activities divided into eight areas, each with its own specifics (real estate developments, energy, assembly construction installations, industry, electronics, construction, medical, services). Each company has its own specialized business management team on which the company provides products or services.

In this paper, the activity of ICCO Systems will be described and analyzed.

At the end of 2019, ICCO Systems had a turnover of 31,783,773 lei, which brought it a market share of 9.62% in Braşov County, respectively 3.81% in the Center area and 0.39 % on Romania, according to the study made by Romanian Universe (<https://www.romanian-universe.ro/>). The market share is increasing on all regional markets, respectively Braşov, the Center area and at the level of the whole of Romania, as can be seen in Table no.1.

Table no 1. ICCO Systems market share in 2019

	Total turnover of hte group (lei)	ICCO Systems turnover (lei)	Share of ICCO Systems (%)
Braşov	330.333.015	31.783.773	9,62
Transilvania	1.835.887.121	31.783.773	1,73
Center	835.081.039	31.783.773	3,81
România	8.099.976.788	31.783.773	0,39

Source: <https://www.romanian-universe.ro/>

Table no. 2 shows the evolution of some financial indicators of ICCO Systems in the period 2014-2019.

Table no.2 The evolution of the financial indicators of the organization in the period 2014-2019

Financial indicators	2014	2015	2016	2017	2018	2019
Turnover (Euro)	4 875 184	5 470 293	6 001 469	5 912 647	5 901 443	6 650 299
Net profit (Euro)	26 503	79 253	111 556	23 240	34 172	123 971
Average number of employees	113	114	119	125	124	132

Source: <https://www.romanian-companies.eu/icco-systems-srl-4522937/>

The data in Table 2 show an upward evolution of turnover and staff in the analyzed period, which is in line with the evolution of the company's market share.

ICCO Systems has selected as suppliers of components for these systems a lot of internationally recognized companies, whose competence and professionalism is certified by standardized documents. The main suppliers come from the member countries of the European Union, but also from the United States of America, Japan or China, the determining criterion being the proof of competence and professionalism through the existence of quality and conformity certificates.

The market for integrated security systems addresses a wide segment of the market, offering security systems for state and private institutions, banks, hotels, hospitals, as well as for individual users, tenants' associations, under conditions of authorization in the field of consulting, installation and service. Its main customers are mainly companies in the industrial sector, where investments have been made for the construction of new production facilities or for the expansion of existing ones. Clients also include public authorities supported by investments made by municipal authorities, most of the projects being financed by European funds. Thus, the main clients are the companies for which the ICCO group of companies develops and builds production spaces and

offices. At national level, among the main competitors we can mention as the most important UTI Group (UTI Systems), Helinick, Civitas (Polystart group), Schrack Seconet AG, Critical Technologies, Honeywell Life Safety Romania S.R.L., Avitech or General Security, Technosec.

4. Research methodology

The general objective of this paper is to explain how ICCO Systems implement the quality strategies, and to present the results it obtained later.

The research methodology mainly aims at two concepts - that of quality management of products or services and that of strategies used to increase the quality of products or services - wanting to highlight the links related to their common approach. In this sense, the theoretical research consisted in gathering information, organizing them in a logical way, analyzing the most significant of them, as well as formulating conclusions; consulting the specialized literature, consulting certain specialized sites. The specific working tools used in the paper were: specialized books, articles and documents specific to the analyzed company.

The information was collected by consulting the bibliographic sources within the library of Transilvania University Braşov and by accessing the databases provided by the university (Science Direct, Web of Science - Core Collection, InCites Journal Citation Reports, Derwent Innovations Index, CABI Forest Science Database).

5. Findings

ICCO Systems develops projects that require "turnkey" solutions for electronic security (burglary, fire, access control, video surveillance), structured voice-data networks, telecommunications and other low and medium voltage installations, ensuring perfect coordination and safety of all works.

ICCO Systems' quality policy represents the organization's intention and direction regarding quality as officially expressed by its top management.

The strategy chosen by ICCO Systems is that of certification and is a strong long-term strategy of the organization that determines a continuous improvement of products and services while stimulating the ability of the management team to meet customer needs and at the same time create conditions to increase labor productivity and thus profit.

By choosing this strategy, ICCO Systems aims to increase the overall efficiency of the company. Thus, through this strategy, ICCO Systems has chosen to implement the procedures required by the quality standards (ISO 9000).

The main objective of ICCO Systems is the continuous increase of the quality of the services provided by increasing the efficiency of the activities in order to satisfy the exigencies of the clients, of other interested parties and to raise its own competitiveness towards the competitors.

The secondary quality objectives of ICCO Systems are:

1. Satisfying the requirements and expectations of customers (customers, local community and other stakeholders) ;
2. Optimizing the costs of quality by focusing on the costs of prevention and evaluation;
3. Training, motivation and performance optimization of staff;
4. Ensuring a safe working environment;
5. Respecting the quality of services provided and works performed;
6. Zero accidents - 75% reduction in the incidence of accident rates at work and occupational diseases.

The certification of quality systems was effectively achieved by obtaining the certifications granted by RIG CERT no. SR EN ISO 9001: 2015. The approach to the implementation and development of the Quality Management System within ICCO Systems consisted of several stages and included the following:

Phase I - A quality representative of the company was appointed to participate in the implementation of the certification, as well as in the subsequent monitoring. In this first phase, an analysis was made of the organizational structure and organization of activities that had functioned until then in society. At this stage, the needs and expectations of customers and other stakeholders

were determined and an analysis was made of the processes within the organization and the problems faced by their development and it was established what is the way to achieve the highest degree of quality. compliance with standards. The internal evaluation of ICCO Systems was performed based on the analysis of the current state of the organization in terms of resources and performance. After the internal evaluation, an external evaluation was performed, respectively of the external environment through various surveys, studies, analyzes. Based on the evaluation of the external and internal environment, a projection of the future performances of ICCO Systems was made.

Phase II - This phase involved the design of the Quality System within ICCO Systems and was carried out in close connection and especially with the involvement of all department heads.

- Identifying the processes in society;
- General medium and long term objectives;
- Process map (interaction between processes);
- Elaboration of the Quality Manual;
- Elaboration of system procedures;
- Elaboration of Work Instructions.

Phase III - This phase involved the implementation of the Quality System within ICCO Systems and was carried out with the collaboration and full involvement of all staff and involved:

- Internal audits in all departments of the company;
- Analysis and evaluation of the system performed by management;
- Permanent improvement of the system;
- Improving the system;
- Simplification and optimization of procedures and processes.

Phase IV - This phase involved the certification of the Quality System within ICCO Systems and was carried out with the collaboration and full involvement of all staff and involved:

- External certification audit;
- Implementation of the Quality Management System;
- Constant monitoring of the Quality Management System.

ICCO Systems aims to lower all costs of quality improvement than the resulting savings. The savings obtained are due to the fact that additional work is reduced due to the correction of mistakes, waste and other direct costs related to defects are reduced.

Various expenses were incurred to obtain the certification. For easy highlighting, in the case of ICCO Systems, these certification costs were divided into three categories:

1. Pre-certification expenses; 60,000 lei
2. Expenses for the certification itself; 59,745 lei
3. Expenses after obtaining the certification. 180,064 lei

The implementation results were analyzed in relation to the proposed objectives:

Objective 1 - The number of complaints decreased from 10 in 2017 to 2 in 2019.

Objective 2 - The share of expenses with the repair of non-compliant products decreased on average by 1% in the total expenses of the company, both in 2019 and in 2020.

Objective 3 - In 2019, ICCO Systems had 0 work accidents and 2 work incidents (ie a 33% reduction in incidents).

Objective 4 - The objective has been met, following the training of all staff on the policies and procedures required by the quality standards.

Objective 5 - In 2019 30% of employees were employed since the date of establishment of the company and a percentage of 55% employees who have more than 3 years in the company.

Objective 6 - In the period 2018-2020, ICCO Systems ensured its compliance with legal requirements and requirements applied in the organization, confirmed by the fact that it did not receive any sanctions from the state authorities.

6. Conclusions

ICCO Systems chose the certification strategy because it is a strategy that in the long run will contribute to the image and competitiveness of the organization. In addition, the implementation of this strategy proves that the management team has modern managerial concepts, and these two elements combined contribute to the development of the organization.

As a result of the implementation of the Quality Management System, ICCO Systems identified the following benefits: the image of the organization was improved, which led to its placement on the competitive market in an advantageous position; the coordination and management of the activity of the entire organization was carried out in a planned and systematic way; increased planning, internal communication, and decision-making capacity; increased supplier tracking capacity; increased customer satisfaction and retention; losses caused by operating errors were reduced; increased discipline at work; resources were used more efficiently; increased the organization's ability to adapt to change; credibility has been improved and customer confidence has been strengthened.

7. References

- Gimenez-Espin, J.A., Jiménez- Jiménez, D. and Martínez-Costa, M., 2013. Organizational culture for total quality management. *Total Quality Management and Business Excellence*, 24(5-6), p.678-692.
- Guzman, M., Roşca, A., Igor, C. and Botnaru, V., 2018. Aspects of quality management useful for the research-development system. *Akademos*, p.25-30, [online] Available at: <http://www.akademos.asm.md/files/25-30_Aspecte%20ale%20managementului%20calitatii,%20utile%20sistemului%20de%20cercetare-dezvoltare.pdf> [Accessed 15 March 2021].
- Herzallah, A.M., Gutiérrez- Gutiérrez, L. and Munoz Rosas, J.F., 2014. Total quality management practices, competitive strategies and financial performance: the case of the Palestinian industrial SMEs. *Total Quality Management & Business Excellence*, 25 (5-6) p.635-649.
- Johannsen, F., 2013. A holistic approach for integrating methods in quality management. *Wirtschaftsinformatik* 63 (4), p.1000.
- Madar, A., 2020. The importance of quality and quality strategies for growing competitiveness in the market. *Bulletin of the Transilvania University*, 1/13 (62), p.41. [online] Available at: http://webbut.unitbv.ro/Bulletin/Series%20V/2020/BULETIN%20I/05_Madar.pdf [Accessed 25 April 2021].
- Priede, J., 2012. Implementation of Quality Management System ISO 9001 in the World and its Strategic Necessity. *Procedia - Social and Behavioral Sciences* 58, pp.1466 – 1475 .
- Romanian companies, ICCO Systems SRL. [online] Available at: < <https://www.romanian-companies.eu/icco-systems-srl-4522937/>>. [Accessed 30.04.2021].
- Sameh M Saad and Mohamed A Khamkham, 2018. Development of an Integrated Quality Management Conceptual Framework for Manufacturing Organizations, *Procedia Manufacturing* 17, pp.587–594.
- Sinha, N. and Dhall, N., 2018. Mediating effect of TQM on relationship between organisational culture and performance: evidence from Indian SMEs, *Total Quality Management and Business Excellence* 31(1):1-25.
- Todoruţ A.V., 2007, *Quality management. Economic theory and practice. SITECH Publishing House, Craiova.*
- Zakuan, N.M., Yusof, S.M., Laosirihongthong, T. and Shaharoun, A.M., 2010. Proposed relationship of TQM and organisational performance using structured equation modelling, *Total Quality Management and Business Excellence*, 21(2) p.185-203.
- ISO 9001/2000. Quality management systems. Requirements.
- SR ISO 8402:1995. Quality management and quality assurance – vocabulary.
- Romanian Universe, [online] Available at: <https://www.romanian-universe.ro/> [Accessed 22 March 2021].