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BARRIERS TO THE CONTINUOUS IMPROVEMENT OF THE QUALITY IN SERVICE OPERATIONS: A BRAZILIAN CASE STUDY

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ABSTRACT

The current world-wide competitive environment and the reduction of protectionist barriers, especially in the developing countries, have enlarged the importance of the quality management in a way that companies can improve their competitiveness. Quality directly influences the economic performance of the companies, as it plays a fundamental role in the customer’s decision; hence, investments in quality systems are carried out with an aim to reach competitiveness.
In Brazil, the change started after the 90s through the vertiginous growth of ISO 9000 certification. However, it is possible to see that a lot of certified service companies have not shown continuous quality improvement, presenting a number of failures. The purpose of this article is to investigate the existing barriers to the real continuous improvement of the quality in service operations. A case study conducted in a service company in Brazil will be presented.

Key words: continuous improvement; total quality control; ISO 9000; service operations.

1. INTRODUCTION

The service-rendering companies are achieving a larger position in the world scenario as new development centers, due to their relevance to the global economy. In this picture, they need to find their competitive force and to elaborate a strategy that besides being focused on the clients’ needs, is able to offer efficient services that will address the client’s expectations accordingly.

New service operations strategies are being researched to gain more flexibility, quality, resource-saving abilities and, consequently, more competitiveness.

However, in order to reach these goals, this competing strategy needs the company to define, measure and monitor some indicators to assure the system’s performance. In this essay, we will evaluate the suitability of total quality control programs in service operations systems, acknowledging the barriers that oppose to the continuous quality improvement.

2. RESEARCHING PROBLEM

The choosing process of the theme looked for an issue that, besides having a practical relevance to the entrepreneurial business, could also be able to present alternatives concerning the choosing of quality management indicators, control-tools, product and process changes, definition of
standards, definition of rules and people’s commitment to the quality control system’s implementation, providing the continuous improvement of the actions and, therefore, assuring the competitive advantage. In this essay, the researching problem is: how can the quality-control system be aligned to the unique characteristics of the service operations in order to provide the continuous improvement of the quality?

2.1. RESEARCH METHODOLOGY

The research method that was chosen is the case-study, once it allows us to observe and widely analyze which are the negative and the positive variables of the setting up of a total quality control system and the afterwards actions to reach continuous improvement. The method to collect data was, initially, bibliographic search for the concepts concerning the systems of service operations, quality control and ISO 9000 implementation. Later on, the company was visited in order to accomplish the analysis of the organizational structure, the processes and the services; the people responsible for the setting up of quality control system were interviewed, as well as the internal quality-control auditors and some collaborators in the implementing process. The asked questions highlighted the hypothesis about the alignment between the quality system, the operation strategy and the actions to achieve continuous improvement.

3. SERVICE-OPERATION SYSTEMS

A production system, according to WILD (1977), aims at gathering the resources meant to be used in the production of assets and services. In other words, an operation system is a process to convert resources in asserts and services.
The production systems may be analyzed according to the function of the operation system as seen by external consumers (see Table 1: Function of the operations system).

<table>
<thead>
<tr>
<th>Main Function</th>
<th>Main Characteristics</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>Changes the form or the composition of the resources</td>
<td>Metallurgic and building companies</td>
</tr>
<tr>
<td>Transporting</td>
<td>Changes the place of the resources</td>
<td>Urban transportation, delivery company</td>
</tr>
<tr>
<td>Supplying</td>
<td>Changes the possession of the resources</td>
<td>Grocery or department stores</td>
</tr>
<tr>
<td>Service-rendering</td>
<td>Changes the status of the resources</td>
<td>Dentists, firemen, hotels, schools</td>
</tr>
</tbody>
</table>

Table 1 – Function of the operation systems
Source: WILD (1997)

So, a production system combines the production resources for manufacturing, transporting, supplying and service-rendering purposes. Classifying the production systems helps to understand the basic concepts and sheds some light upon the various functions of the operation systems, which must have as their main goal the consumer’s satisfaction and the productivity of the used resources.

GIANESI & CORRÊA (1994) judge that the consumer acts directly in the manufacturing system’s output, meaning that he performs, in the system, the action of “pulling”. In the service system, however, the consumer acts directly in the input, meaning that he performs the action of “pushing”.

In service-operation systems, the client is the element which triggers the operation and, many times, decides when and how the operation is to begin, performing an input in the operation system, not necessarily controlled by the managing board.

The service operations differ from the manufacturing ones due especially to the presence of the consumer. From this fundamental difference come many others regarding the operation-service management, which makes them have to be analyzed inside their own context.
In the service business, according to GIANESI & CORRÊA (1994), the gathering between marketing and operations leads to a higher integration of the actions throughout both functions and that, additionally, given the intense contact between the client and the system, the service-rendering companies need a higher integration and a higher coherence in every level.

The management of production systems may be defined as acquiring and using resources aiming at achieving a balance of the whole production chain, in order to reach the strategic goals.

The managers’ mission is, therefore, to configure the production system through a series of consistent internal connections that put forth the priorities and the inferred *trade-offs* of the competitive situation in the strategy (SKINNER, 1996).

In the services area, according to GIANESI & CORRÊA (1994), the client or an asset of theirs is treated by the system in a determined way. The presence, the time and the moving cost of the time to get to the facilities are, therefore, considered in the economical decision.

This service system characteristic leads to the necessity of a decentralized operation control; thus, the total quality control system may help, with efficacy, the controlling and the management of the operations due to the implementation of rules and standards for the activities, the operations and the processes, making easier the actions and the decisions that aim at maintaining quality, increasing efficiency and productivity.

The companies, however, have different strengths and weaknesses, even when they produce similar products, and may choose from various options how to stand out among their competitors. This means they need to choose among various production systems, make decisions regarding the amount of important sectors, define operational characteristics and adopt an information system able to correctly identify the additional costs of low quality, the mistakes and
failures of the processes besides other necessary information to evaluate the operational performance.

SLACK (1999) defines that the goal of a strategy in manufacturing operations must be related to the performance-evaluation criteria used by the clients for its products concerning the quality, quickness, trustworthiness, flexibility and costs.

In the service business, however, the criteria are even wider, given the higher contact between the client and the operations. Identifying the criteria through which the client evaluates the products and the services is a way to understand better the client’s expectations and, therefore, a manner to obtain the factors that determine satisfaction.

SASSER et al. (1978) confirm the existence of specific evaluation criteria of the service systems, such as intangibility, perishability, variability and simultaneity of the service.

A service is a perishable asset and may not be stockpiled. Its production takes place at the same time its consumption happens. So, not only does the process creates the product, but it also deploys it simultaneously to the client, which will evaluate the service through tangible, explicit intangible (five senses: smell, taste, touch, sight and hearing) and implicit intangible (psychological aspect: welfare, comfort, status, etc.) benefits.

KELLOGG & NIE (1995) judge that the process through which a service is produced is less influenced by the sophistication level of the equipments used than by the level of influence that the client has in the process.

ZEITHAML et al. (1990) present three basic differences that they judge fundamental in the comparison between assets and services: intangibility (services are performances and experiences, not objects), heterogeneity (the service’s performance varies depending on the company, the consumer and the day) and inseparability (the quality in services happens during
the processes of production and delivery of the service, usually during the interaction between consumer and service renderer).

Thus, in the process of formulating the competitive strategy guided by the quality, the system must identify which are the control-tools and the indicators that demonstrate the individual characteristics of each operation, and, additionally, it must analyze the client’s satisfaction in order for it to be considered successful.

3. TOTAL QUALITY MANAGEMENT

Quality, according to SLACK (1999), generates cost reduction in re-renderings, refuses, devolutions and, mainly, satisfies costumers, affecting directly the company’s performance in comparison with its competitors.

Quality management also affects directly the organizational economic performance. Investments in the implementation and the certification of quality systems, the introduction of new control-tools, the changes in the product’s characteristics, activities and processes are actions that aim at achieving this competitive advantage, with the purpose of increasing the client’s satisfaction.

In Brazil, this change may be seen from the nineties on, with the increase in the amount of ISO 9000 certificates. In 1990, only 18 companies were certified. In the first quarter of 1998, they were over 2,400.

The standards of the ISO 9000 series brought benefits to the companies and to the clients, once restructuring and reorganizing operations and processes according to the quality management system makes it possible to diminish variations and inconsistencies. Therefore, the great majority of the organizations want to achieve the certified standard for strategy purposes.
The question is: how to achieve the continuous operational improvement after the ISO certification?

Continuous improvement is the process that guides a gradual, systematic, organized and sequential work, aiming at achieving and sustaining a competitive advantage in the way the operations, the activities and the processes are accomplished. The continuous improvement, therefore, has to do with the constant search for the productive system’s quality increase. So, the company’s efforts to increase its results must be permanent, once there’s always a way to do better.

The companies that intend to compete in a globalized environment, either manufacturing or service-rendering ones, need to remodel their operations, activities and processes searching for the most efficient way, achieving efficacy in their productive model, generating incomes greater than their production costs.

The total quality management (TQM) appeared at first as a way to help the company management, aiming at producing well and correctly up from the first time, eliminating the additional costs brought by problems with low quality.

With the setting up of quality management programs, the companies are able to achieve a higher level in their product and service quality through the use of quality-control tools, strategically deploying the organizational goals through all the sectors and levels of the organization.

In recent years, service-rendering organizations in the financial, transports, telecommunications, health and education business have been facing deep changes in competitiveness due to the market’s enlargement and the falling of market-entering barriers.

KAPLAN & COOPER (1997) judge that these changes have caused different impacts (a mixture of benefits): on one hand, well-administered organizations with a good market, client and new
IT knowledge may become more profitable and competitive with the ending of the market and price protection rules. On the other hand, however, organizations that fail to understand the origins of the profitability of their products, services, clients and markets may lose market shares quickly and, without price-protecting shield, find barriers to regain growth.

This process of deep changes brought challenges to the service companies, meaning the ones that intend to be successful in the global market must completely address their client’s necessities and expectations, needing, therefore, to compete simultaneously in many competing dimensions, such as, for instance, quality, trustworthiness and flexibility.

Some concepts were configured with the purpose of helping the companies that intend to compete in many dimensions. The manufacturing companies, for example, in the eighties, began a revolution in the entrepreneurial management philosophy, whose results was the bringing rise of the fundamental principles of continuous improvement and waste containing (OHNO, 1997). These principles identify the importance of quality in the products and services offered to the clients. They are the bond between the service and the client and, additionally, they cause impacts in the company’s profit.

The service operation companies, following the model of manufacturing companies, realized that quality is an organizational characteristic (and not only a physical characteristic of the product or process) and adopted quality in services as a group of attributes that the client notices in the operation system (REICHHELD & SASSER, 1990). However, quality can only be identified and improved if it can be measured. When service companies begin to decipher the system’s inefficiency, such as, for instance, the costs and consequences cause by a client that doesn’t return to the company, they realize the need to reduce them quickly. However, the data available in the traditional costing systems and the financial reports are not enough for that purpose.
Losing a client is usually more related to the company’s profit than to the scale economies, market shares, unit costs and other factors associated to the competitive advantage. So, increasing the number of served clients means more profit.

REICHHELD & SASSER (1990) conclude that it isn’t possible to manage quality without knowing it; so, measuring quality is indispensable to formulate a competitive strategy.

A new problem was brought about: if quality must be measured and its result is noticed in the company’s profits, how should we measure the costs of the actions that improve quality?

FEIGENBAUM (1994) claims that measuring the performance of the company is fundamental for the quality and quality-costs management, it gives the managers the information they need to make decisions and to take actions to improve quality and productivity. The quality costs are the bases that allow investments in programs of this nature to be evaluated according to their costs improvement, profit increase and other benefits.

Investments in quality and improvement programs must bring financial feedback in order to pull their weight. Thus, the quality-management process demands tools that can generate information able to help escalate and help administrators to introduce continuous improvements into the proceedings and the processes, in every area of the company, with the purpose of eliminating the wasting, reducing the costs and the spreading of quality.

4. CASE-STUDY

Performing a case-study is a concrete way to observe the positive and the negative variations of a total-quality system implementation and to see the afterwards actions taken to accomplish a continuous quality improvement.
The choosing of the company followed some required criteria in order to accomplish the goal of this research.

It is a company that works in the service business, which obtained the ISO 9002/94 certificate in 1999, but was neither able to meet the goals established in the total quality program implementation nor the expected process and services improvements, giving up the certification program in 2002. The purpose of the research is to analyze the implementation goals of the quality programs and the aims of the company’s competitive strategy. From there on, we mean to build an analytical table of the supposed barriers that were responsible for the continuous improvement failure.

4.1. COMPANY DESCRIPTION

The case-study refers to a company acting in the consulting-service and workforce allocation business. Nowadays, the company has about 700 employees and branches in every Brazilian state. The updated goal is to keep the leadership arrived at through the quality-oriented strategy and, in order to reach this goal, the company is increasing the number of branches in the country with the purpose of augmenting the volume of clients served and the services rendered.

The company’s mission is offering to the market some solutions that can contribute to the professional formation of the individuals in order to allow them to integrate the job market. The values defined in order to guarantee the mission’s success are:

- Well-served clients;
- Ethical and impartial being;
- Credibility and trustworthiness;
- Continuous improvement;
• Result-oriented practices.

The service-rendering process is divided in three steps: the first is to receive, register and classify the raw-material, which, in this case, are the people applying for a job opportunity. The second step is the selling process, summarized as searching, identifying, registering and classifying the companies interested in the human material available; the last step is the follow through after the selling.

In order to assure trustworthiness of the quality, the company chose to certify the following operations:

• Businesses with companies;
• Registering and attending the raw-material;
• Selecting and recruiting;
• Contraction;
• After-sales follow through;
• Paying remuneration’s.

4.2. QUALITY-MANAGEMENT IMPLEMENTATION

The ISO 9002/94 rule has the purpose of certifying the models to assure quality standards concerning production, facilities and rendered services. In the analyzed company, the rendered service’s quality is noticed by the client during the production process. So, the operation strategy focuses on quickness, veracity of the information and homogeneity of the activities. The quality goals selected to guide the improvement actions are:

• Client’s satisfaction;
• Client/company relations based on trusting;
• Trustworthiness of the client’s and the company’s information;

• Continuous improvement of quality.

A condition to a successful implementation of the total quality control and the continuous improvement programs is defining, gauging and controlling indicators that will be used in the action-structure of the company to improve its competitive performance. The company identified 09 indicators for the quality management (see Table 2: Indicators of the quality).

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Sales</th>
<th>Processes</th>
<th>Continuous improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>amount of service orders (SO) achieved up to 15 days / SOs accomplished in the current month</td>
<td>lasting-time average of the current month dismissed contracts</td>
<td>average of the month indicators / last semester’s average</td>
</tr>
<tr>
<td></td>
<td>amount of sale proposals / contracts signed in the month</td>
<td>month amount of people hired / amount of registered people</td>
<td>amount of training hours / amount of collaborators involved in the quality system</td>
</tr>
<tr>
<td></td>
<td>month amount of people hired / month amount of started SOs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| client satisfaction | amount of received satisfaction polls / amount of sent satisfaction polls | amount of clients (peoples/companies) that indicated the company           |                        |

| continous improvement | average of the month indicators / last semester’s average | amount of training hours / amount of collaborators involved in the quality system |   |

Table 2 - Indicators of the quality

The result for the company expected after certification was increasing the amount of service acquisitions, the client-serving quickness and the trustworthiness of the information systems (registered people and companies).

All the interviewed people who participated in the total quality control implementation chose the word “euphoria” to illustrate the feeling and the commitment during the certification process.

The reports about the quality control implementation process prove the efficiency and the
responsibility of the company that was hired to take care of the process, which was also noticed in the poll reports. Rule compliance, standardization, register documents and the offered training were carried on with success, generating several reference guides about quality, job-description, quality procedures, work instructions and quality collaborators/auditors. The certifying company considered the program implementation to be a success, granting the object company with an ISO 9002/94 certificate.

However, one year later, the internal auditors realized an increase in the volume of non-compliance’s, in the processes and services, which began to be registered and presented to the quality managing board.

The quality managers began a process of reevaluating the quality rules and arrived at the following problems:

- Reduction of the hirable raw-material (people);
- Increase in the average client-serving time;
- Increase in the average contract-signing time.

The attempts to change the activities and the process in order to reach a compliance of the service operations to the ISO 9002/94 rules were unsuccessful. Non-compliance (exceptions and the deviation from a specified requisite of the service system) was constant in all the process’ steps. The directing board lost interest in the quality management, once the financial results didn’t improve and the amount of clients complaining increased. The quality collaborators quit following the standardizing rules, due to the pressure for results. So, the quality management was limited to serve the sales and computer training, meaning that the criteria and the methods needed to assure the continuous quality improvement of the operations were no longer being executed or followed.
5. CONCLUSION

The result of this research is able to demonstrate the critical factors for the alignment between the quality system, the operation strategy and the actions to reach continuous improvement. The organizational interests need to be evaluated in the process that defines the quality-goals, setting the aims in order to guide the operations. The operation strategy must create mechanisms to identify tasks and activities that allow continuous improvement. Additionally, the success of the continuous improvement operations depends on the coherence between: a) the rules and the standards of quality certification; b) the specificities of the service operations and c) the individual needs of the clients. Another important issue is the company’s need to define financial indicators along with the physical indicators in order to assure the economical good performance.

Table 3 below show our conclusions, bringing the barriers that were identified and that oppose to the continuous improvement of the service operations.

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company’s Directing Board</td>
<td>• Because it’s a general trend;</td>
</tr>
<tr>
<td></td>
<td>• Immediate results;</td>
</tr>
<tr>
<td></td>
<td>• Lack of a clear definition of the organizational and the quality goals.</td>
</tr>
<tr>
<td>Operation Strategy</td>
<td>• Lack of conformity between the quality goals and the operation’s specificities;</td>
</tr>
<tr>
<td></td>
<td>• Great amount of exceptions in order to serve a determined number of clients;</td>
</tr>
<tr>
<td></td>
<td>• Lack of actions that contribute to the continuous improvement.</td>
</tr>
<tr>
<td>Indicators</td>
<td>• Lack of financial indicators;</td>
</tr>
<tr>
<td></td>
<td>• Don’t represent the reality of the operations.</td>
</tr>
<tr>
<td>Cost strategy</td>
<td>• Lack of true analyzes concerning the cost of bad quality;</td>
</tr>
<tr>
<td></td>
<td>• Lack of analyzes of the financial gains obtained with quality management;</td>
</tr>
<tr>
<td></td>
<td>• Lack of a parameter for the investment feedback.</td>
</tr>
</tbody>
</table>

Table 3 - Barriers to the continuous improvement of quality in service operations.
BIBLIOGRAPHY


