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Quality management system in the company GVC Consultants according to ISO 9001:2015.

Sistema de gestión de la calidad en la empresa GVC consultores según la norma ISO 9001:2015

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Abstract

The objective of any organization is to obtain satisfied customers, which is based not only on the final service but on all the activities that directly and indirectly influence its performance. The planning, control and improvement of the processes involved is important because thanks to this the organization can minimize problems and add value to its activities. ISO 9001 in its 2015 version seeks to improve all processes of the organization, including internal and external parties that contribute to the development and delivery of the product or service. This makes it a perfect component for organizational restructuring and continuous improvement. This work designs a quality management system in GVC Consultants based on ISO 9001:2015. A diagnosis of the current situation is made, an improvement plan is proposed and the impact of the change towards a quality culture is measured. The diagnosis allows us to understand the organization and propose improvements. The implementation of the ISO 9001:2015 system seeks to restructure processes, involve the entire organization and instill a culture of continuous improvement. The expected result is to increase customer satisfaction through quality products and services.

key words: System, quality, organization, standard.

Resumen

El objetivo de toda organización es obtener clientes satisfechos, lo cual se basa no solo en el servicio final sino en todas las actividades que influyen directa e indirectamente en su realización. La planeación, el control y la mejora de los procesos que intervienen es importante ya que gracias a ello la organización puede minimizar problemas y agregar valor a sus actividades. La norma ISO 9001 en su versión 2015 busca mejorar todos los procesos de la organización, incluyendo a las partes internas y externas que contribuyen a la elaboración y entrega del producto o servicio. Esto hace que sea un componente perfecto para la reestructuración organizacional y la mejora constante. Este trabajo diseña un sistema de gestión de calidad en GVC Consultores basado en ISO 9001:2015. Se realiza un diagnóstico de la situación actual, se propone un plan de mejora y se mide el impacto del cambio hacia una cultura de calidad. El diagnóstico permite conocer la organización y proponer mejoras. La implementación del sistema ISO 9001:2015 busca reestructurar los procesos, involucrar a toda la organización e inculcar una cultura de mejora continua. El resultado esperado es aumentar la satisfacción del cliente a través de productos y servicios de calidad.

Palabras clave: Sistema, calidad, organización, norma.

1. Introduction

The objective of every organization is to obtain satisfied customers, which is based not only on the final service but on all the activities that influence directly and indirectly with their realization. Planning, control, improvement of all the intervening processes is of the utmost importance since thanks to all this the organization can take measures to help minimize problems and add value to its activities.

The ISO 9001 standard with its new 2015 version seeks to improve all the organization's processes, as well as the inclusion of internal and external parties that help in the elaboration and delivery of the service or product offered, making this standard a perfect component for organizational restructuring and constant improvement [1]. Therefore, this degree work seeks to design a quality management system in the company GVC Consultores based on the ISO 9001:2015 standard, making a diagnosis in the organization that allows us to know the current situation of the organization, allows us to make a proposal for improvement and measure the impact of the change to a culture of quality [2].

Thanks to the observation method, it was possible to diagnose that in the company GVC Consultores Asociados the biggest problem due to different factors is the lack of interest on the part of customers in hiring the services it offers. The factors are lack of coordination between departments, lack of defined processes, workers do not have defined functions and delay in answering the client. All this causes the client to look for other alternatives where the response is immediate and where their requirements are treated as a priority.

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We must always bear in mind that the organization will always seek to satisfy its clients (internal and external), since if the employees of the company are committed and loyal to it, their results will be positive and the organization will have high performance, which will be reflected in the commitment [3].

We were able to determine that due to these causes, the following consequences may occur: Due to poor coordination of middle management with senior management, there may be a lack of synchronization of activities; Lack of communication is one of the main causes of poor service provided by a company; Without defined processes, staff cannot determine the activities that interact in the process, who owns the process, who is responsible for it, and this will cause disorder in the organization of the company; Having processes defined is extremely important so that the final service is just as the client required it; Likewise, when functions are not identified, employees do not take responsibility for a problem caused. All this leads us to delays in responding to the client, the information received is not the most adequate or reliable, and therefore the loss of these clients [4].

1.1 Organization

An organization is a structured organizational structure, made up of functions, positions, tasks that shape and help employees achieve the organization's objectives. There are two types of organizations:

- Formal: An organization is said to be formal when it is duly structured and all employees are aware of the functions, processes, objectives, procedures, values, etc. and work as a group towards the same goal.
- **Informal:** An organization is said to be informal when each person or department works individually towards different objectives.

1.2 Organization Structure

It is based on organizing the tasks carried out in the organization and employees into specific departments where there are processes and procedures that employees must follow to achieve departmental objectives and in turn meet the company's objectives. The organization can be structured according to different models:

- Departmentalization by business functions
- Departmentalization by territory
- Departmentalization by customer group
- Departmentalization by products

There is no specific way in which the organization must be structured, everything consists in the way top management wants to present their organization chart to the client.

1.3 Organization Communication

In all organizations, poor or bad communication between people, departments and hierarchies is the origin of problems within it, so having good communication skills is key to achieving correct transmission of the message, since it helps employees by telling them how to do the work, if they are failing, how they could improve or if they are doing a good job.

Communication has the following directions:

- **Downward communication:** It is based on communication from top management to the lowest level in the organization. In this type of communication, top management must indicate why they decided and must ask for advice from the people they are supervising so that there is a commitment.
- Upward communication: It is the opposite of downward communication. This type of communication serves for top management to receive feedback, to find out if employees are happy at work and serves to receive ideas on how to improve processes.
- Lateral communication: It takes place horizontally, that is, between people of the same hierarchical level and helps coordinate between them [5].

1.4 Planning in the organization

For an organization to know how it will plan, it must first have specified what its goals are, since when these are well defined and identified, programs and projects are carried out to achieve them. Planning is the course where we define where we want to go, how we should get there, with what means and in how much time [6].

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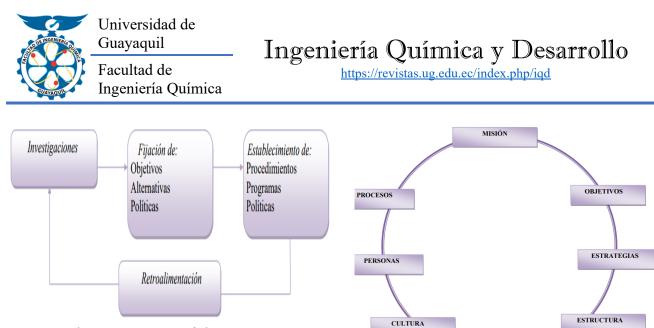


Fig. 1. Basic aspects of planning

In Figure 1 we can understand that planning has methods and tools to be able to project order for decision making, it sets out the path that the organization has to follow to prevent future problems by reserving resources. The plans are the detailed sketches that tell us what is going to be done, these plans are measured on a time scale and are divided as follows:

- Short Term: Less than or equal to 12 months.
- Medium Term: From 12 to 36 months
- Long Term: Greater than 36 months [7].

1.4 Significant points in the organizational change driven by the quality management system.

Implementing a Quality Management System in an organization is not something that can be done quickly, since commonly implementing changes in an organization is not an easy task and it will involve facing three challenges:

- 1. Structural Modification
- 2. Due to the structural modification, the Quality Management System also implies that a cultural change must also be made.
- 3. And since structural modifications and cultural change do not happen overnight, planning must be done to achieve sustainable and lasting coordination.

Fig. 2 Significant points in organizational change driven by the quality management system.

In Figure 2 we can observe how (Camisón, Cruz, & González, 2006) define the 7 key aspects for organizational change, which must be properly aligned.

Mission: It is focused on determining the origin and reason for the organization's existence, this must be communicated to the entire organization so that employees are focused.

Objectives: These are the fruits that the organization wants to achieve in a certain period of time.

Strategy: Path of how activities will be carried out.

Structure: It is the link between people and activities (roles, processes, procedures, manuals) that they accept in order to meet the objectives.

Culture: These are all the patterns, values and beliefs that are made known in the organization so that they are the orientation of how employees should work alone and as a team.

People: They are the human resources that are integrated with the structure of the organization, knowing the culture of it so that they can achieve the objectives.

Processes: These are the sequencing of the organization's activities that are defined in processes in order to be controlled.

A Quality Management System can be implemented in any organization, whether service or manufacturing, there are several models and standards where the organization can guide itself to ensure that the change is being carried out correctly, one of them is the ISO 9001:2015 Standard which helps us with the implementation of the QMS and this standard is certifiable.

1.5 Generalities of the ISO 9001:2015 standard

When an organization decides to implement a quality management system it is deciding to take the organization to a higher level, in order to have a product

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or service as the customer required it and even more than expected [8]. The benefits that the organization can achieve by implementing a quality management system based on the standard are being able to foresee future risks, acquire well-structured processes, comply with customer mandates, have the ability to combine other management standards, all this causes the organization to have preventive and corrective plans for future problems and these have less impact.

This standard is based on the process approach that works together with the Plan/Do/Check/Act (PDCA) cycle, the risk-based concept and quality principles [9].

1.6 Quality principles

Customer focus: The organization must take the customer into account and make them participate in the design process of the product or service they request.

- Leadership: In achieving the organization's objectives, leadership ensures that everyone in the organization is motivated and focused on meeting these objectives.
- Staff participation: Seeks to have all levels of the organization work as a team, communicate and commit to it.
- Process approach: Seeks to integrate all processes in the organization, not seeing them individually but as a system to meet requirements [10].
- Improvement: After all processes have interacted and the customer receives the product or service, actions should be taken to enable the organization to continuously improve its processes.
- Evidence-based decision making: Any changes made must be justified.
- Relationship management: It is the relationship between the 7 principles of the standard [11].

1.7 Process approach

For organizations to satisfy customers they must have processes and programs that work together with customer requirements. We can say that processes are a set of activities that are related to each other that transforms inputs into outputs. In every organization, key processes must be defined which are those that have a considerable impact on the product or service, they are the processes that give competitiveness to the organization, which must work together to meet the expectations of the organization [12].

Entrada	Actividades de Valor	Salida
	Agregado	
Materia Prima	Actividades de valor agregado	Productos
Componentes	realizadas por individuos, grupos de trabajo, funciones,	Servicios
Instrucciones	máquinas u organizaciones	Resultados
Información		

Fig. 3. Process.

1.8 PDCA Cycle

The PDCA cycle is known as one of the methodologies that foresees problems and improves processes. This methodology was promoted by W. Edwards Deming and consists of a cycle that helps improve the organization's processes based on continuous improvement since without it the processes will become vicious and not virtuous which is what is sought in every organization. The circle that Deming proposed consists of 4 phases: plan, do, check and act, which together help the entire organization seek the much-desired continuous improvement. The planning phase is based on identifying the processes and everything that interacts for them to take place effectively in the organization and knowing how they are being carried out, understanding the customer's perspective, gathering information. identifying difficulties and proposing corrective and preventive actions. In the do phase, a pilot project is implemented to help evaluate and obtain data. In the verification phase, it is determined whether the pilot project works as expected through evaluations of the data obtained and determining if it is necessary to adopt new opportunities; sometimes the proposed project is not the most appropriate and must be modified or a new one created. In the last phase, which is act, the project and pilot are updated and implemented, which is announced to the entire organization and once implemented, it goes back to the planning phase for continuous improvement [13].

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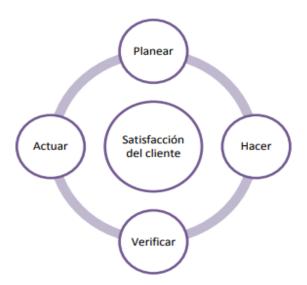


Fig. 4. The circle of Deming.

1.9 Risk-based management

The moment the organization decides to plan, one of the main elements it has to identify is the prevention of future problems, this is called risk-based management. Which is focused on recognizing, studying, calculating possible solutions and controlling potential risks [14]. The goal of risk-based management is to minimize potential negative impacts and increase positive ones. Risk-based management can be described with the following processes: Planning risk management where the activities to be carried out are defined and possible risks are identified, detailing risks where future risks are listed and their characteristics are recorded, analyzing (qualitatively and quantitatively) in this process risks are observed and classified according to their impact and likelihood of occurrence, and finally risks are monitored since in this process the planned activities are put into operation and it is reviewed whether the same risks that were thought occurred, if not the new risks are recognized and it is determined if risk management is effective. We must bear in mind that there are beneficial risks and negative risks which are known as opportunities and threats, the organization must be comprehensive and must accept the risks of each process and its risk management must be honest and clear to avoid major problems [15].

2. Materials and methods

The methods used in this degree work were the following:

Deductive: Since we obtained conclusions based from the general to the most detailed possible, with the hypotheses we used the deductive method.

Inductive: Since when using observation as a research instrument we obtained information from the most detailed to the most general.

2.1 Research techniques and instruments

The research techniques used were the following:

- Survey: Where a survey model was developed as a research instrument to find out more about the organization and gather valuable information to understand the problem and be able to calculate the hypotheses.
- Observation: This technique was used in order to observe the day to day in the organization and thus obtain information on how management is carried out, we used the form as research instruments.
- The instruments used were the following:
- Survey model.
- Observation sheet.

2.2 Population

The population or object of study is the employees of the company GVC Consultores y Asociados and a group of corporate clients described below:

- General Director: His main function is to visit multinational corporate clients and close negotiations ranging from 6 months to 1 year and he is the main instructor.
- Executive Director: Supervises the commercial, processes, logistics part and is present in medium courses.
- Project Manager: Supervises the operations, meets with clients to close the business and is present at all courses.
- Key Account Manager: In charge of gathering data and speaking directly with clients.
- Process Manager: In charge of following up on course logistics and payment related issues.
- Assistants: Support everyone in the organization.
- Group of corporate clients: Frequent customers who use the GCV Consultores y Asociados company service.
- General Accountant: In charge of the company's accounting.
- The consolidated population is 20 people.

3. Results

3.1 Filter Questions

Table 1. Data table (gender)

Gender	
Male	4
Female	7
Total	11

Table 2. Data table (Occupation)

		Occupation	n
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Process Supervisor	1
Marketing Engineer	2
Commercial Engineer	1
Students	2
CPA	1
International Business Engineer	1
Organizational Psychologist	3
Total	11

Table of the occupation variable where the different occupations of the employees of the company GVC Consultores are registered.

Survey

1. Is there any kind of quality policy in the organization?

Table 3.	
Yes	10
No	1
Total	11

It can be deduced that there is a quality policy in the organization, but it is not known to everyone in the organization.

2. How much do you know about quality management systems?

Table 4.	
Nothing	1
Enough	6
A Lot	4
Total	11

In the organization, most employees have solid knowledge about the use and methodology of quality management systems.

3. Which of the following quality tools is used? Table 5.

Process Map	0
Procedure Manual	0
Strategic Plan	8
Service Charter	3
Total	11

The organization does not have a quality management system implemented, but they do use quality tools such as the strategic plan and the service charter, which help them in their daily activities.

4. Are surveys or any type of tool used in the organization to measure customer satisfaction after service delivery?

Table 0.	
Yes	11
No	0
Total	11

It was identified that after delivering each service, surveys are conducted with customers in order to measure satisfaction with the service provided.

5.	For which of the following variables has the
custome	er not felt satisfied with the service provided?
Table 7.	

Poor Attention	0
Delays in responding to the customer	1
Low quality levels	0
None	10
Total	11

Thanks to the surveys that are carried out, 9% indicated that customers are not satisfied because sometimes the organization is delayed in responding to their requirements.

6.	Do you consider that the service provided to
the cus	tomer is:
m 11 0	

Table 8.	
Bad	0
Fair	0
Satisfactory	1
Good	1
Very Good	9
Total	11

In the organization, 82% think that the service provided is very good, but the remaining 18% think it is good and satisfactory and that there are ways for it to improve.

7. Are processes and procedure manuals defined in the organization? Table 9.

14610).		
Yes	2	
No	9	
Total	11	

In the organization, 82% agree that processes and job manuals have not been defined in the organization.

8. Mark with an (X) the procedures you think are important to have in the organization. Table 10.

Document Control Procedure	0
Record Control Procedure	0
Internal Audit Procedure	0
Nonconforming Service Control Procedure	6
Corrective, preventive and improvement action Procedure	5
Total	11

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It was identified that in the organization the procedures needed are those to control nonconforming service and implement corrective and preventive actions.

9. Do you think implementing management indicators in the organization would be helpful?

Yes	11	
No	0	
Total	11	

It was also identified that everyone in the organization agrees that implementing management indicators will help them when measuring their work.

10. Do you think implementing a Quality Management System would help the organization?

Table 12.		
Yes	11	
No	0	
Total	11	

Everyone in the organization agrees that implementing a quality management system will help improve the organization overall.

3.1 Tabulation and analysis of the ISO 9001:2015 standard checklist at GVC company

In order to make the improvement proposal, it was essential to use the ISO 9001: 2015 standard checklist to identify whether the organization does or does not comply with the standard's statements. Below are the results:



Fig. 5 Information obtained from the verification list section 4.

Although company GVC Consultores does not have an implemented quality management system, the ISO 9001:2015 standard checklist was used to determine the

degree to which company GVC Consultores complies with it. Section 4 of the ISO 9001:2015 standard is generally based on the context of the organization, this means that this section ensures the well-being of all stakeholders, as well as the description of all activities, whether they belong to the organization or not. The organization complies with 29% of the requirements of this section while failing to comply with 71% since company GVC Consultores has not defined its scope and therefore only looks after its own interests, although it has identified who make up the interested parties, the organization does not look after their well-being.



Fig. 6 Information obtained from the verification list section 5.

Section 5 of the standard is based on the commitment and leadership of the highest levels in the organization with the quality management system. Since the company lacks this quality management system, it fails to comply with 57% of this section; however, top management is completely interested and committed to improving the organization and has a quality policy that is not documented but is known in the organization, therefore complying with this section by 43%..

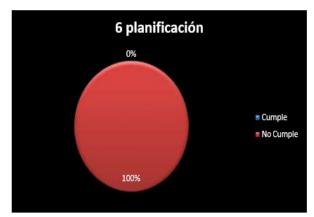


Fig. 7. Information obtained from the verification list section 6.

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Section 6 focuses on planning the quality management system and identifies all the activities that must be carried out for its success. Company GVC Consultores fails to comply with this section 100% due to the lack of a quality management system.



Fig. 8 Information obtained from the verification list section 7.

In this section the standard requires the organization to know what resources it will need, to define whether they are internal or external, to have the necessary infrastructure for the service provided and for it to be in perfect condition; Company GVC Consultores complies with this by 33% but fails to comply with 67% since this section also takes into consideration the degree of knowledge, preparation of the organization's employees. Employee profiles must be analyzed, direct them in the most appropriate job position according to the profile, carry out constant evaluations, documentation and information control must also be done, all of which the company does not comply with.

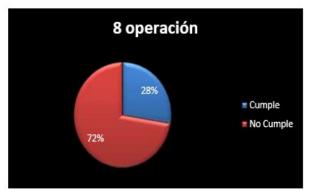


Fig. 9 Information obtained from the verification list section 8.

This section focuses on the service itself and all the components involved in its execution, starting with planning which does not exist in company GVC Consultores, therefore there are no controls to help this process, there is no control over external suppliers, which generates 72% non-compliance with the requirements of

this section and 28% compliance since there is constant interaction with the customer.

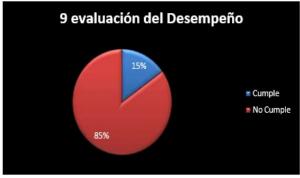


Fig. 10 Information obtained from the verification list section 9.

In this section, company GVC Consultores complied with 15% since it is interested in the customer and evaluates their degree of satisfaction once the service has been delivered, measures have been taken to correct dissatisfactions, but this section also ensures internal audits, methods to guarantee service excellence, document information for analysis, planning, all of which the company does not carry out and its degree of non-compliance was 85%.

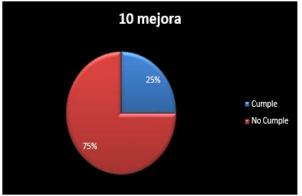


Fig. 11 Information obtained from the verification list section 10.

In this section the company GVC Consultores complies with 25% since customer satisfaction surveys are conducted once the service has been delivered, they have taken responsibility for breaches and have improved, it has failed by 75% because improvements have been made for the moment and not constantly.

3.2 ISO 9001: 2015 quality management system

To facilitate understanding of the quality management system evaluation, all sections were consolidated.

Table 13. Consolidado

erates 72% non-compliance with the requirements of	Apartado	Cumple	No cumple
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4	4,14%	10,14%
5	6,14%	8,14%
6	0,00%	14,29%
7	4,71%	9,57%
8	4,00%	10,29%
9	2,14%	12,14%
10	3,57%	10,71%
QMS	Complies	Does not comply
QMS ISO 9001:2015	24,71%	75,29%

By consolidating compliance with the sections, it was found that the organization complies with the ISO 9001: 2015 QMS by 25% while failing to comply by 75%, reaching the conclusion that the organization must change and improve its structure in many ways as evidenced by the checklist and verification.

4. Conclusions

As observed, company GVC Consultores does not have a quality management system applied in its structure, therefore its processes are not controlled or measured, and the final service is not always delivered as the client expects.

Thanks to the application of the checklist according to the ISO 9001:2015 standard, it was possible to see that there is a large gap in the organization regarding having a culture of quality and lack of documentation was found, no records are kept, personnel are not evaluated constantly, poor resource distribution, these are several of the disagreements found that lead to the service provided not being satisfactory all the time and if measures are not taken to help the organization improve, it would fall into more serious problems such as increased quality costs, decreased performance, resulting in customer loss.

It was also evident that senior management is very determined and committed to taking action so that the current situation of the organization changes and they are focused on the change having to be made focused on the culture of quality provided by implementing a quality management system. That is why we were allowed to carry out this degree work as a starting point for the desired change.

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