

Continuous Improvement as a Competitive Strategy within Organizational Quality Processes

Paola Silva-Tobar¹, Wladimir Chacón-Paredes², and Cesar Guevara³

ABSTRACT

The business environment is constantly changing, due to the different realities and complexities (socioeconomic, political, market, environmental, technological, axiological, among others) that surround them, generated by competitive components that push towards operational excellence. In this context, continuous improvement is understood as a process that helps maintain and improve competitiveness in each business process, with the purpose of providing quality service and consolidating customer satisfaction. The objective of the study is to analyze the methods of continuous improvement for the strengthening of competitiveness related to quality in organizational processes. An investigation is proposed with a mixed non-experimental, field and longitudinal perspective; using hermeneutics as a method of interpretation. Among the results, it stands out that once the value chain and the diagnosis were applied by applying the ISO 9001: 2015 checklist, it was determined that certain non-conformities affected the production, commercial and financial processes. The conclusions denote that using the Kaizen method, results are obtained that allow the consolidation of operational excellence, over all those that have direct inherence with the attention to consumers.

Keywords: Value chain, Quality, ISO 9001:2015, Continuous improvement methods

INTRODUCTION

Companies have been evolving and growing rapidly, with a view to facing new disruptions and divergent changes that directly affect their functionality and operability (Gómez et al., 2020). Likewise, the authors emphasize that businesses generally go through phases (operational, structural, human talent, technological, sustainability, social responsibility, globalization) that are quite distinctive, whose characterizations are framed within processes related to managerial and organizational management, where each one of them emphasizes a relevant aspect of administrative science that is in the constant search for continuous improvement, quality and excellence.

In this sense, continuous improvement can be understood as a philosophy or way of life (culture) that focuses on the development of operational and

¹Universidad Central del Ecuador, Quito, Ecuador

²Universidad de Carabobo, Bárbula, Venezuela

³Centrer of Mechatronics and Interactive Systems (MIST), Universidad Tecnológica Indoamérica, Av. Machala y Sabanilla, Quito, Ecuador

functional adversities that organizations suffer, with the intention of balancing activities, turning them into an organizational competitive advantage (Alaña et al., 2018). Another way to describe it is to take it as an organized sequence of activities that allows solving problems or managing projects in any area of the company and that must produce added value for the customer. Value means the total satisfaction of the needs and expectations of the consumer in terms of price, performance, term, production, environmental impact and ethical principles. It is an organized systematic process of continuous improvement used to guarantee the fulfillment of objectives, undertaking processes under teamwork for which a common purpose and a single process are required.

The search for operational excellence is a differentiating element with which organizations focus to face the volatility of the economy, intense competition and market uncertainties. Keeping abreast of the company's knowledge and behavior (internal and external) plays an important role when undertaking new business models and strengthening operating procedures with a view to achieving an intelligent business level and a systemic and innovative vision, especially all in processes framed towards quality and organizational profitability (Garbanzo-Vargas, 2015).

In Ecuador there is a trend on the part of companies that are concerned with being pioneers in terms of quality and operational productivity (Guaipatin and Schwartz, 2014). The initiatives are framed towards the development of procedural policies that guide and support the processes that make up the organization. Contreras et al. (2017) that in order to make progress in this aspect, it is necessary to establish management levels or indicators that allow the introduction of a philosophy of continuous improvement and to be able to evaluate the results of the operations, especially those that are framed in customer satisfaction. These indicators can generally be concentrated through a Quality Management System (QMS) that serves as a tool that merges a series of activities to control tasks effectively and efficiently.

The management system must contain conformity characteristics adhered to continuous improvement and, in this way, avoid distortions that could be reflected in the marketing and positioning of the product/service. This approach must be designed from the perspective of quality, in fact, González et al. (2016) state that it emerges as a competitive source that addresses internal and external processes that in many cases adapts to models (Deming, Quality Management model based on ISO 9001 processes, Kaizen model, European Excellence, Lean Manufacturing, Six Sigma, Just in Time, Porter's five forces, continuous improvement), which seek to strengthen organizational operations.

This research is carried out in the family business known as "Importadora Altamirano e Hijos" IMPALDIESEL Cía. Ltda., located in the city of Ambato, Tungurahua Province-Ecuador; which has been in the market for 26 years dedicated to the importation and merchandising of spare parts for diesel automobiles, in which it is intended to analyze the methods of continuous improvement for the strengthening of competitiveness related to quality in organizational processes.

198 Silva-Tobar et al.

An investigation with a mixed non-experimental, field and longitudinal perspective is proposed; using hermeneutics as a method of interpretation. It is based on the following study variables: continuous improvement as a dependent variable (mixed) and the merchandising and dispatch process as independent (quantitative) in accordance with the collection and descriptive analysis related to the information extracted from the company "Importadora Altamirano e Hijos" IMPALDIESEL Cía. Ltda (Table 1).

The checklist determined by the ISO 9001: 2015 standard was applied, which allowed knowing the conformities and non-conformities that support changes and weaknesses and strengthening that must be covered in the design of the continuous improvement model based on the quality of the processes in the merchandising and clearance departments of the company "Importador Altamirano e Hijos" IPALDIESEL Cía. Ltda.

It is precisely in the merchandising and dispatch departments that a series of setbacks have been occurring at the level of their activities, originated by the way the functions are structured at the organizational level, supported by the experience and empirical dedication of those involved in the process, bringing as its main problem the dissatisfaction in terms of customer service, whose consequences lie in the delays (time) for the delivery of the products between marketing and the customer, Inconsistencies in the quantities between the physical inventory and what the invoicing system shows, errors in the delivery of products (wrong brands or measurements), disorientation when selecting or locating the products to be shipped, inappropriate physical organization of products in the warehouse and poor use of storage space, and inadequate management of inventory management policies due to the use of ineffective methods for projecting demand and the sales plan, generating stock-outs and back orders.

If the aforementioned continues, the company IMPALDIESEL could present collapses between these dependencies (merchandising and dispatch), which would cause both tangible (monetary mass) and intangible losses (prestige, loyalty, fidelity) as well as problems of effectiveness, productivity, efficiency and competitiveness when delivering the product(s) (spare parts). It is important that the Importer internalizes these situations and finds the roots that originate it, which can become a product of ignorance of production processes, little training of the personnel involved, outdated or unequivocal use in terms of handling equipment, non-existence of measurement indicators of quality for continuous improvement and to be able to evaluate if the activities tied to the processes are directed towards quality and excellence.

On average only 25% is the percentage that is determined derived from the procedural compliance that the company "Importadora Altamirano e Hijos" IMPALDIESEL Cía. Ltda., presents in the merchandising and dispatch departments. It is important to determine and implement a system based on continuous quality improvement, which strengthens these non-conformities with a view to systematically strengthening the activities and operations in these vital dependencies for the growth and commercial development of the organization, taking into consideration the own resources which the company has.

 Table 1. ISO 9001:2015 standard requirement.

Sections	Requirement ISO 9001:2015 Standard	Satisfy	Fails	Argumentation	Responsable
A	Planning and	X		3	Direction
B	operational control	X	v	processes undertaken empirically that do	
2	Control		X	not add value to the	
C			X	process	
D			X		
Е		X			
1		X			
2	G	77	X	771 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	36 1 11 1
A B	Communication with the customer	X			Merchandising
С	with the customer	Λ	X	the customer is very fair and needs greater	
D			X	empathy	
Е			X		
A	Determination of	X		Undefined processes	Merchandising
+1	requirements for products and services		X	that are accommodated as	
2		77	X		
В	Products and	X		needed The clarity of the	Manahandising and
A B	services	Λ	X	reviews between the	Merchandising and dispatch
C	SCI VICCS		X	same	dispaten
D			X	interdepartmental	
Е			X	requirements are not	
A	Documented		X	well defined. In some	Merchandising and
В	information		X	cases, improvisations are used to be able to	dispatch
A	Change in requirements for products and services		X	respond quickly to the customer.	Merchandising
A	Products and	X		The clarity of the	Merchandising and
В	services		X	reviews between the	dispatch
C			X	same interdepartmental	
D E			X	requirements are not	
A	Documented		X	well defined. In some	Merchandising and
В	information		X	cases, improvisations	dispatch
A	Change in requirements for products and services		X	are used to be able to give the customer a quick response.	Merchandising
A	Generalities	X		It is about centralizing	Merchandising and
В			X	the information	dispatch
C			X		
A	Types and scope of control		X	Knowledge is subjective and does	Direction y merchandising
B C	or control	X	X	not add value to	merchandising
1		X		processes	
1	l	11		1	

(Continued)

200 Silva-Tobar et al.

Table 1. Continued.

	1	1		1	T
2	_		X		
D			X		
A	Information for	X		The information	Merchandising and
В	eternal providers	X		collected is based on	dispatch
1		X		experience, without	
2			X	sustenance or	
3			X	documentary support	
C			X	from the organization	
D			X	itself.	
E			X		
F			X		
A	Merchandising		X	Periodic follow-ups	Merchandising and
1	control		X	are not carried out.	dispatch
2			X	There was no	
В		X		evidence of stocks of	
С			X	monitoring formats or	
D		X		operational support	
E	1	X			
F			X		
G	1		X	1	
H		X	71	1	
	Property belonging to customers or external suppliers Presenvación		X	The existence of formal controls cannot be verified	Merchandising and dispatch
A	Post delivery		X	In most of the cases	Dispatch
В	activities		X	evidenced, it can be	1
С			X	verified that through	
D		X		the experience of	
Е		X		human capital the	
	Change control		X	company is based as	
A	Release of	X		an operational	
В	products and services		X	reference.	
A	Unauthorized		X	The interdepartmental	Dispatch
В	output		X	relationship is very	•
C	1 ^	X		informal. However, in	
D		X		spite of	
A	The organization		X	disagreements, there	Merchandising and
В	must keep		X	is a good	dispatch
				communication	1
C	documentary		l X	Communication	
C D	documentary information	X	X	climate.	

Among the changes that were determined as a result of the application of the initial instruments, it is possible to highlight:

- Excess inventory (items projected into the future that cause loss of space and cost);
- Waiting times (ratio of time lost between operators and customers waiting for information);
- Inappropriate processes (activities that do not add value to productivity or planning) and
- Defects in the final product-deliveries (details failures in the product tracking process in the merchandising and dispatch departments).

CONCLUSION

Markets are becoming more global, complex and changing, which is why it is not always possible to foresee crises. The coronavirus pandemic has made

this very clear. Therefore, in the face of the great uncertainty that affects the international and national markets, the importer has made the decision to focus on those small short-term goals that could be key and strategic to sustain itself over time and be able to withstand the onslaught of current economic situation and; even lay solid foundations for the future growth of the organization.

The merchandising and dispatch departments presented among their diagnoses what are known as changes, which are indicators of errors or nonconformities that must be resolved and separated from the processes, with a view to strengthening the activities that really add value to the company. Communication and empathy on the part of the workers is essential to consolidate the new steps to follow at the level of quality activities, as well as to lay the foundations of a new quality philosophy or culture to integrate continuous improvements into activities that serve as a boost to cover the goals and objectives set by the shareholders. The purpose of the Kaizen methodology is to achieve goals and objectives gradually and continuously, eliminating activities that only add losses caused by unequivocal activity management. Of course, in addition to the benefits provided by the Kaizen method, it is also important to incorporate good software that serves as an ally to the continuous improvement system.

REFERENCES

- Alaña, T., Crespo, M., y Gonzaga, S. (2018) Cómo las estrategias empresariales permiten una ventaja competitiva en las micro, pequeñas y medianas empresas de la provincia de El Oro? Universidad y Sociedad, 10(2), 251–256. http://scielo.sld.cu/pdf/rus/v10n2/2218-3620-rus-10-02-257.pdf
- Contreras, F., Olaya, J., y Matos, F. (2017). Gestión por procesos, indicadores y estándares para unidades de información. Biblioteca Nacional del Perú. http://eprints.rclis.org/31012/1/Gesti%C3%B3n%20por%20procesos%2C%20indicadores%20estandares.pdf
- Guaipatin, C., y Schwartz, L. (2014). Ecuador. Análisis del Sistema Nacional de Innovación. Hacia la consolidación de una cultura innovadora. BID. https://www.epn.edu.ec/wp-content/up loads/2017/03/CTI-MON-Ecuador-An%C3%A1lisis-del-Sistema-Nacional-de-Innovaci %C3%B3n.pdf
- Garbanzo-Vargas, G. (2015). Desarrollo organizacional y los procesos de cambio en las instituciones educativas, un reto de la gestión de la educación. Revista Educación, 40(1), 67–87. DOI: 10.15517/revedu.v40i1.22534
- Gómez, J., Rodríguez, E., Salas, J. y Acevedo, E. (2020). Análisis comparativo de la pequeña y mediana empresa en América Latina. Visión Gerencial, 19(2), 254–271.
- González, L., Tapia, M., Hernández, D., y Luna, A. (2016). Factores críticos de éxito en la mejora de la calidad de la industria manufacturera en el Municipio de Celaya. Pistas Educativas, 38(121), 99–116. http://www.itcelaya.edu.mx/ojs/index.php/pistas/article/viewFile/506/581