Proposal for the improvement of the integral logistics of a courier, shipping and express delivery company in the city of Villahermosa, Tabasco

Propuesta para el mejoramiento de la logística integral de una empresa de servicios de mensajería, envíos y entregas exprés en la ciudad de Villahermosa, Tabasco

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#### **DOI**: 10.35429/EJROP.2023.16.9.1.6

Received January 10, 2023; Accepted June 30, 2023

### Abstract

Logistics activities currently represent variables of singular importance in the competitiveness of companies, which is evidenced by evaluating their impact on costs, their link with the level of customer service, their importance in the reliability of operations, safety, and their determining role with respect to many of the values perceived by the market. The purpose of this study is to evaluate logistics processes in an integral manner, considering the before, during and after of these processes. The methodology considers the Likert scale to collect qualitative aspects and transform them into quantitative aspects in order to obtain the necessary information to design a proposal that fits the requirements and needs of the company under study.

### Productivity, Integral measurement, Instrument

Resumen

Las actividades logísticas representan en la actualidad, variables de singular importancia en la competitividad de las empresas, lo cual se evidencia al evaluar su incidencia en los costos, su vínculo con el nivel de servicio al cliente, su importancia en la confiabilidad de las operaciones, la seguridad, y su rol determinante respecto muchos de los valores percibidos por el mercado. El presente estudio tiene como finalidad evaluar os procesos logísticos de manera integral, considerando el antes, durante y después de estos procesos. La metodología considera la escala de Likert para recopilar aspectos cualitativos V transformarlos a aspectos cuantitativos y así obtener la información necesaria para diseñar una propuesta que se acople a los requerimientos y necesidades de la empresa objeto de estudio.

Logística, Likert, Instrumento de medición

**Citation:** ELISEO-DANTÉS, Hortensia, MOREJÓN-SÁNCHEZ, Juana María, PÉREZ-GARMENDIA, Gloria and BALDERRABANO-BRIONES, Jazmín. Proposal for the improvement of the integral logistics of a courier, shipping and express delivery company in the city of Villahermosa, Tabasco. ECORFAN Journal-Republic of Paraguay. 2023. 9-16:1-6.

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# Introduction

Logistics activities currently represent variables of singular importance in the competitiveness of companies, which is evident when evaluating their impact on costs, their link with the level of customer service, their importance in the reliability of operations, safety, and their determining role with respect to many of the values perceived by the market.

This is why logistics is no longer just a way of managing regional, national or international distribution flows, opting for the optimization of operating costs, services and times.

Logistics today is understood as integrated and involves multiple key business relationships between the members of a value chain.

For companies dedicated to courier services, shipments and express deliveries, the study and analysis of integrated logistics for continuous improvement represents a competitive advantage. Therefore, it is necessary to consider not only internal aspects, but also external ones such as economic, social, cultural, technological, environmental and political variables.

# Methodology

For the present research, the Likert scale was used, which is a rating scale used to question an individual on his or her level of agreement or disagreement with a statement. It is ideal for measuring reactions, attitudes and behaviours of a person, i.e., qualitative aspects.

Unlike a simple yes/no question, the Likert scale allows respondents to qualify their answers and broaden the spectrum to diversify the degree of their response.

The Likert scale is one of the types of measurement scales used primarily in marketing research for understanding a consumer's opinions and attitudes towards a brand, product or target market.

It is useful mainly for measuring and understanding the degree of agreement of a person or respondent to a certain affirmative or negative statement. It also has the following advantages:

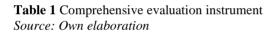
- To have statistical elements that help you make intelligent decisions.
- Know the performance of the areas in relation to customer management.
- Know how satisfied customers are during their journey and what their relationship with the company is like.
- Have a tool to improve advertising, sales management and customer service.
- Get a support for the constant improvement of your inbound strategy by analysing the quality of interactions.

A measurement instrument was designed in three parts, elements integrated in the process before logistics, during logistics and after logistics, as shown in tables 1, 2 and 3.

Each section will be made up of questions essentially designed to assess in detail the current situation of the company in terms of logistics. It is worth mentioning that each question will be evaluated under the Likert scale where:

- 5 =Strongly agree
- 4 = Agree
- 3 = Undecided
- 2 = Disagree
- 1 = Strongly disagree

	Measuring Instrument	Likert scale						
	Questions	5	4	3	2	1		
BEFORE	Does the company have adequate and efficient suppliers for its needs?							
	Do you consider that the company does not carry out a prior assessment when choosing a supplier?							
	Do you think the company evaluates its suppliers poorly?							
	Do you think that the methods they use to evaluate supplies and suppliers are not optimal?							
	Does the company not have the type of warehouse that suits its needs?							
	Does the company not have an adequate supply source?							
	Do you consider that the company meets today's sustainability needs?							
	Does the company adapt and innovate to the needs of its customers?							
	Is the company's technology adequate?							
	Do you consider that the company complies with the guidelines established by the different supplier, supply and sustainability standards?							



	Measuring Instrument	Likert scale			)	
	Questions	5	4	3	2	1
	Do you have an efficient customer control system?					
	Do you consider customer service to be good?					
	Does the company promote the development of the company?					
	Is the packaging in an appropriate way?					
	Do they consider themselves a good innovation and technology					
DURING	company? How flexible is the company to changes in the environment?					
DUI	Are there frequent problems with orders?					
	What measures are taken to avoid problems in the process with the customer?					
	Do you consider the methods used to avoid problems in the logistics system to be efficient?					
	Do you consider that the company is not using the right technology to be competitive					
	with others?					

**Table 2** Comprehensive evaluation instrumentSource: Own elaboration

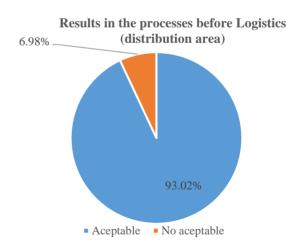
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	Measuring Instrument		Likert scale			
	Questions	5	4	3	2	1
AFTER	Are the transport and cargo units in good condition?					
	Do you consider that the service is as efficient as they say it is?					
	Do you consider that the company is at the forefront of technology with respect to its service?					
	Is sustainability promoted by the company?					
	Does the company guarantee the fulfilment of the service in time and form?					
	Do you consider the company to be innovative and technological?					
	Does the company take measures to be able to avoid problems in the customer process?					
	How accessible is the company to current changes?					
	Is the company's communication with other departments adequate?					
	Do you think that the company is technologically up to date with regard to its services?					

**Table 3** Comprehensive Evaluation InstrumentSource: Own elaboration

### Results

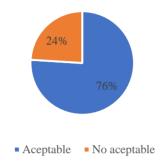
The instrument was applied to two areas of the company; in the distribution area it was possible to obtain the data shown in graph 1, where it can be seen that 93.02% of the activities carried out in the different departments are acceptable, and that 6.98% of minor failures are registered due to different factors external to the organization.



**Graphic 1** Results in the processes before Logistics (distribution area) *Source: Own elaboration.* 

According to the data obtained in graph 2 it can be interpreted that the activities carried out in this department in the phase during the logistic process have 76% of acceptance with respect to the registered values and 24% also derived from minor problems because of the changing environment in which we are in.

Results in the processes during the Logistics (distribution area).



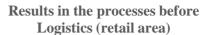
**Graphic 2** Results in the processes during the logistics (distribution area) Source: Own elaboration

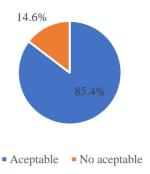
According to the information gathered and shown in Graph 3, it is interpreted that the activities carried out in the departments in the after phase of the logistics process have an efficient level of acceptance of 93% and 7% is due to the problems that still derive from the pandemic.



**Graphic 3** Process results after logistics (distribution area) *Source: Own elaboration* 

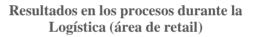
The second area evaluated was retail, where it can be observed that 85.37% of the activities carried out in the different departments are acceptable, and that 14.63% of minor failures are registered due to different factors external to the organisation, as shown in graph 4.

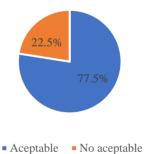




**Graphic 4** Results in the processes before Logistics (retail area) Source: Own elaboration

In graph 5 it can be seen that the activities carried out in this department in the phase of during the logistic process have 77.50% of acceptance with respect to the registered values and 22.50% also derived from minor problems as a consequence of the changing environment in which we are living.





**Graphic 5** Results in the processes during Logistics (retail area)

Source: Own elaboration

Graph 6 shows that the activities carried out in the departments in the after phase of the logistics process have an efficient level of acceptance of 87.50% and 12.50%.

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**Graphic 6** Process results after logistics (retail area) *Source: Own elaboration* 

## Proposal

Nowadays companies assume that the main assets of any organization are focused on people, i.e., customers.

Large companies depend on several factors for their stability in the market, these are: The quality of the product or service they offer to their customers, productivity, profitability, customer satisfaction and internal and external image.

The internal image is the reflection of the corporate policy within the organization. The external image is the actions in relation to the outside world: customers, partners, competitors.

For a company to function properly, the focus must be on the people who work in the organization so that they are committed and have all the necessary tools to carry out their day-today tasks.

Inadequate management of the people working in an organization can cause countless problems in the performance of an organization.

- Lack of motivation.
- Ignorance of responsibilities.
- Lack of training / information.
- Lack of internal communication.
- Lack of cooperation (Empathy, teamwork, etc.).
- Lack of coordination.

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- Lack of leadership.
- Conflicts of interest.
  - Work climate.

The internal communication of the organization towards the workers is a very important part of the organization, since by fulfilling this task, it can be said that there will be a good working environment where a commitment of all the parties involved will be achieved, an efficient leadership will be exercised and there will be an excellent coordination between all the people within an organization.

Internal communication goes hand in hand with productivity because if there is a good working environment within the organization there will be good planning and execution, but if there is no good communication then the opposite will happen and the reason for the problem must be verified.

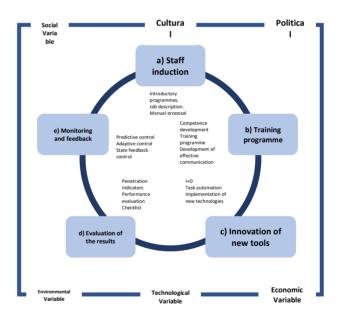


Figure 1 Improvement proposal for the improvement of Logistics

Source: Own elaboration, 2023

### Conclusions

Today, we can say that integrated communication enables organisations to deliver a consistent message across channels to support the business objective and create a more seamless experience for stakeholders and to build trust and loyalty among them.

ELISEO-DANTÉS, Hortensia, MOREJÓN-SÁNCHEZ, Juana María, PÉREZ-GARMENDIA, Gloria and BALDERRABANO-BRIONES, Jazmín. Proposal for the improvement of the integral logistics of a courier, shipping and express delivery company in the city of Villahermosa, Tabasco. ECORFAN Journal-Republic of Paraguay. 2023 Integral logistics seeks a balance from a systemic approach, which is of great importance for companies to be able to have the ability to respond in a reliable, courteous and accessible way that serves in the quality of communications as the fundamental objective and to develop strategies more attuned to the needs of customers.

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