


**RELATIONSHIP BETWEEN LOGISTICS MANAGEMENT AND PUBLIC SECTOR  
TRANSPARENCY IN PERU**

**Erlith Tafur Huaman<sup>A</sup>, Victor Hugo Puican Rodriguez<sup>B</sup>, Diana Lisbeth Valdivia  
Andrade<sup>C</sup>, Erlita Llatas Becerra<sup>D</sup>, Merly Janet Fernandez Gavidia<sup>E</sup>**



ARTICLE INFO	ABSTRACT
<p><b>Article history:</b></p> <p><b>Received</b> 13 January 2023</p> <p><b>Accepted</b> 07 March 2023</p>	<p><b>Purpose:</b> The objective of this research was to determine the relationship of significance between logistics management and public transparency in the public sector in Peru.</p>
<p><b>Keywords:</b></p> <p>Management; Ethics; Institution; User; Supply; Storage; Audit; Efficiency; Effectiveness.</p>	<p><b>Theoretical framework:</b> Current literature has reported good findings on both logistics management and transparency. However, there is still much to research and learn about GL and T because it is an ever-evolving development.</p> <p><b>Design/methodology/approach:</b> The methodology was quantitative, using deductive and analytical methods addressing non-experimental and correlational inferences. The instrument was a survey, through an applied questionnaire to 90 public sector workers.</p> <p><b>Findings:</b> The results revealed that logistics management is deficient 43%, public transparency is deficient 57%, likewise, a <math>p=0.000&lt;0.01</math>, Kendall's Tau-b (65%) and Spearman's Rho (67%) were reached.</p> <p><b>Research, Practical &amp; Social implications:</b> We suggest an agenda for future research and highlight the contributions made to logistics management and transparency.</p>
	<p><b>Originality/value:</b> the level of relationship between logistics management and public transparency is considerable positive and highly significant, which means that by complying with supply standards and stock control, the entity can provide quality information and thus the inspection office will be able to audit the transparency of the data.</p> <p>Doi: <a href="https://doi.org/10.26668/businessreview/2023.v8i3.1425">https://doi.org/10.26668/businessreview/2023.v8i3.1425</a></p>

**RELAÇÃO ENTRE A GESTÃO LOGÍSTICA E A TRANSPARÊNCIA DO SETOR PÚBLICO DE  
PERU**

**RESUMO**

**Finalidade:** O objetivo desta pesquisa foi determinar a relação de significância entre gestão logística e transparência pública do setor público em Peru.

<sup>A</sup> Magister. University Cesar Vallejo. Av. Larco, 1770, Trujillo 13001, Peru. E-mail: [etafurh@ucvvirtual.edu.pe](mailto:etafurh@ucvvirtual.edu.pe)  
Orcid: <https://orcid.org/0000-0001-5787-3847>

<sup>B</sup> Doctor. University Cesar Vallejo. Av. Larco, 1770, Trujillo 13001, Peru. E-mail: [vpuican@ucvvirtual.edu.pe](mailto:vpuican@ucvvirtual.edu.pe)  
Orcid: <https://orcid.org/0000-0001-7402-9576>

<sup>C</sup> Magister. University Cesar Vallejo. Av. Larco, 1770, Trujillo 13001, Peru.  
E-mail: [dvaldiviaa@ucvvirtual.edu.pe](mailto:dvaldiviaa@ucvvirtual.edu.pe) Orcid: <https://orcid.org/0000-0002-9583-845X>

<sup>D</sup> Magister. University Cesar Vallejo. Av. Larco, 1770, Trujillo 13001, Peru. E-mail: [ellatasb@ucvvirtual.edu.pe](mailto:ellatasb@ucvvirtual.edu.pe)  
Orcid: <https://orcid.org/0000-0002-0635-9175>

<sup>E</sup> Bachiller. Chiclayo Private University. Pimentel 5372, Chiclayo, 14000, Peru.  
E-mail: [merlyhjk\\_1968@hotmail.com](mailto:merlyhjk_1968@hotmail.com) Orcid: <https://orcid.org/0000-0002-9879-8107>

**Quadro teórico:** A literatura atual tem relatado boas constatações tanto na gestão logística quanto na transparência. Entretanto, ainda há muito a pesquisar e aprender sobre GL e T porque é um desenvolvimento em constante evolução.

**Concepção/método/abordagem:** A metodologia considerada foi quantitativa, utilizando os métodos dedutivo e analítico, de nível aplicado, não experimental e correlacional, a técnica foi o survey e o instrumento o questionário, aplicado a 90 servidores públicos.

**Resultados:** Os resultados revelaram que a gestão logística é deficiente em 43%, a transparência pública é deficiente em 57%, da mesma forma, um  $p=0,000<0,01$ , um Kendall's Tau-b (65%) e um Spearman's Rho (67%) foram atingidos. %).

**Investigação, implicações práticas e sociais:** Sugerimos uma agenda para pesquisas futuras e destacamos as contribuições feitas para a gestão logística e transparência.

**Investigação, implicações práticas e sociais:** Concluindo que o nível de relação que existe entre a gestão logística e a transparência pública é consideravelmente positivo e altamente significativo, isto significa que o cumprimento das normas de abastecimento e controle de stocks permite à entidade fornecer informação de qualidade e assim o gabinete de fiscalização poderá realizar o controle na transparência dos dados.

**Palavras-chave:** Gestão, Ética, Instituição, Usuário, Abastecimento, Armazenamento, Auditoria, Eficiência, Eficácia.

## RELACIÓN ENTRE GESTIÓN LOGÍSTICA Y TRANSPARENCIA DEL SECTOR PÚBLICO EN PERÚ

### RESUMEN

**Propósito:** El objetivo de esta investigación fue determinar la relación de significancia entre la gestión logística y la transparencia pública del sector público en Perú.

**Marco teórico:** La literatura actual ha reportado buenos hallazgos tanto en la gestión logística como en la transparencia. Sin embargo, aún hay mucho que investigar y aprender sobre el GL y el T porque es un desarrollo en evolución permanente

**Diseño/metodología/enfoque:** La metodología considerada fue cuantitativa, utilizando los métodos deductivo y analítico, de nivel aplicada, no experimental y correlacional, la técnica fue la encuesta y el instrumento el cuestionario, aplicado a 90 trabajadores del sector público.

**Resultados:** Los resultados revelaron que la gestión logística es deficiente un 43%, la transparencia pública es deficiente un 57%, asimismo, se alcanzó un  $p=0.000<0.01$ , un Tau-b de Kendall (65%) y un Rho de Spearman (67%).

**Investigación, implicaciones prácticas y sociales:** Sugerimos una agenda de investigación futura y destacamos las contribuciones realizadas a la gestión logística y la transparencia

**Investigación, implicaciones prácticas y sociales:** Concluyendo que el nivel de relación que existe entre la gestión logística y la transparencia pública es positiva considerable y altamente significativa, esto quiere decir que al cumplir con las normas de abastecimiento y el control de existencias permite a la entidad brindar información de calidad y con ello la oficina de inspección podrá realizar la fiscalización en la transparencia de los datos.

**Palabras clave:** Gestión, Ética, Institución, Usuario, Abastecimiento, Almacenamiento, Auditoría, Eficiencia, Eficacia.

### INTRODUCTION

Globalization has allowed countries to initiate large-scale exports and imports, allowing them to achieve the social welfare of all the people living in their territory at the national level (Aslam et al. 2021).

Where the effectiveness of the three levels of government must be 100%, because, only through the proper use of economic resources it will be possible to meet the needs that the state is obliged to safeguard each of its citizens (Shammi et al. 2020).

But in Russia there are still deficiencies in the logistic systems that the Government has acquired supposedly to improve the transparency of the expenses that are being executed for the benefit of the population, but from 38% of corruption, it has only been reduced to 17% in 2020 (Borisova et al. 2021).

According to Maity et al. (2021). The problems generated by the lack of transparency is that ordinary citizens cannot have full access to information on public contracts made by governments. Thus, of the 60% of the executed budgets, only 5% are evidenced and incompletely. (Androniceanu, 2021).

In addition, such information is published 12 months after its execution, showing that the municipalities do not comply with the structure required by law, generating distrust of people towards government entities (Yang, 2021). Of the requirements that are presented, 75% are not published on social networks and the entity's website, they are the logistical processes and procedures, as well as classified information for each public procurement and the form for receiving requests for access to public information, which is essential for citizens who wish to request any information.

According to ECLAC (2020). It indicates that, despite the measures that the executive branch has been taking, such as the good governance norms, it has not allowed its fundamental axes to be executed efficiently, because citizens still cannot access the public information that by law the government entities are obliged to deliver such information.

79% of the entities in Tacna do not comply in uploading information on the actions being carried out by the supply and logistics department. (Ministerio de Justicia y Derechos Humanos, 2021). On the other hand, in Arequipa, only the municipalities show a drop of 49% in all publications of purchases made in 2020, where the biggest problems are evidenced in the regional health department, where despite the fact that the budget was increased to combat the COVID-19 pandemic, they have only published 5% of all expenditures made in 2020, leading to multiple negative interpretations by the public. (MINSAs, 2020).

In the public sector, there is insufficient verification of the requirements established in the Law of State Contracts and its Regulations for the signing of contracts derived from selection procedures, as well as the splitting of purchase orders contracting less than eight fiscal units to avoid the invitation to the selection procedures established in the Law of State Contracts. On the other hand, with regard to public transparency, the problem lies mainly in the fact that the supply department does not fully comply in uploading to the SEACE all types of contracts that the entity enters into, carrying them out after the established deadline.

Logistics management is very important because it allows the entity to maintain optimal inventory levels, allowing employees to adequately perform their work functions, leading the institution to achieve its goals, but for this it is extremely necessary that the authorities, officers and employees are transparent in the use of the resources assigned to them, since this shows effectiveness and efficiency in the processes carried out.

As background, the following were considered Borisova et al. (2021) concluded that the lack of digital technologies and supply chain tools in public entities has been causing different negative circumstances to the entities of this country, such as the lack of protection of the interests and security of the State, as well as economic stability.

Meanwhile, Crosi et al. (2021) mentioned that the deficiencies in the logistic operations of the municipalities are leaving negative environmental footprints diminishing the life cycle of different species, generating complaints from the inhabitants because the same elected authorities are the ones that motivate these measures, for not having norms and logistic systems that allow maintaining an exhaustive control of the business logistic operations, as well as those of the same entity.

In addition, Hellani et al. (2021) indicated that the indicators that affect and damage the trust of citizens in the little or no transparency of the economic data that the authorities in charge of public entities have been executing, being one of the factors by which logistics has been affected.

In addition, Thompson and Anderson (2021) revealed that during the time when the pandemic was very strong, the governments took extreme measures, such as delivering food to low-income families, being the local governments responsible, through the supply department, reflecting multiple failures at the time of executing this action, such as lack of knowledge in operations, lack of values and principles of those responsible, and the high level of corruption that was evidenced, thus demonstrating that the logistics management of the municipalities is not humanitarian, but rather, that it seeks the interests of a certain group of people.

On the other hand, Benito et al. (2021) indicated that the lack of emphasis at the time of disseminating information on issues related to public management is causing complaints from citizens, because they consider that acts of corruption are being committed in the municipalities.

Likewise, Silva (2020) concluded that the review of the different stages of e-government implemented by the city of Quito allows understanding its failures, resulting in a weak structure and not achieving the main objectives of the e-government plan.

Meanwhile, Vizcarra (2020) indicated that the logistics management is adverse due to the different deficiencies in the communication of shortages and in the realization of the supply

symbolization, being generated by the failures in the internal control. Likewise, Del Aguila (2019) indicated that there is significant evidence that open government has a significant impact on Change Management ( $Rho = 0.846$ ;  $p < 0.05$ ).

In addition, Montes de Oca (2019) indicated that performing a compliance audit was important for logistics management ( $0.006 < 0.05$ ). Similarly, Hawkins et al. (2017) revealed that the lack of attitudes in the policy on the transparency of economic information executed by the authorities of governmental entities hinders governance and democracy, being generated by the little support from the entities that regulate and supervise the execution of the budgets assigned to the localities.

Moreover, Sobral and Neto (2020) appoints that for the public sector to function to its full potential, it must make efficient use of public resources by employing innovative technologies and maintaining transparency in every one procurement procedures.

Similarly, Moore (2021) notes that public officials should prioritize "public value creation" using publicly owned assets. Tax revenues used to finance public services are an example of such an asset.

This research was justified on a societal level because citizens will be able to see how the organization's economic resources are being used in real time through time transparency. Furthermore, it was theoretically justified by the working capital approach, where logistics management is considered, a model composed of tasks aimed at improving internal organizational structures. On the other hand, the transparency variable was justified in the theory of responsibility as an ethical imperative because it could explain the trinomial: the good, the obligation and the ought to be; in practice, this study was justified because it allowed to know which are the limitations that are causing the logistics management to be deficient when it comes to transparently report the financial resources used by the institutions.

The main objective was to determine the relationship between logistics management and transparency in the public sector in Peru.

## **LITERATURE REVIEW**

Goldratt's theory of management by constraints (1981) because it involves the restrictions evidenced in purchasing management, supply management, storage and distribution, being necessary that the planning, organization, evaluation and control of complex systems, must work efficiently with the available resources. Also, everything must be clear, because this will allow us to make good decisions, thus avoiding the misappropriation of funds

and waste of raw materials and goods that are used inappropriately in the offices of the municipalities.

At the moment of receiving and distributing the different donations made by NGOs and developed countries, several problems in public logistics management were evidenced, such as lack of knowledge, irresponsibility and lack of commitment, which was reflected in the decisions made at that time, being the most affected the vulnerable people (Yang, 2021).

Workers put aside ethics when purchasing different products required by the offices, likewise, they demonstrated irresponsibility in their work functions, being the indicators that have been seriously affecting the supply chain by the misuse of the economic resources that the State provides to municipalities (Maramura & Shava, 2021).

Logistics management is the degree to which an organization implements modern logistics solutions to improve the performance of each of its activities that it executes on a daily basis allowing the stability and proper functioning of the areas of the entity. (Werner & Golinska, 2021).

On the other hand, Bekele and Tikahun (2021) it as the attention with the right quantities, in the right conditions, delivered in the right place and at the right time, having to evaluate the costs of the goods in a correct and transparent way.

Purchasing is immersed in logistics management as conceptualized by Ferrara et al. (2021), while for the dimension of supply management in public entities, the contribution of Rustian et al. (2021) was used, and for the dimensions of storage and distribution, the knowledge of Ferrara et al. (2021) was considered.

Purchasing management is the requirements made by collaborators and users, through orders that must be met in a timely manner, at the right time and place (Ferrara et al. 2021).

Likewise, it does the supply in public entities, here it is stated that it is the annual contracting plan that the government entity has and it must comply with all the principles that govern all the contracting that is needed in the institution or is simply necessary to achieve the common welfare (Rustian et al. 2021).

In the same way, storage does, at this point it refers to all the rules that control, regulate and audit all the supply processes and the control of the stock of goods owned by the entity, which must be for the exclusive use of the activities that the institution has as its nature (Ferrara et al. 2021).

As well as distribution, in this case it refers to the entry and exit of goods that the company acquires from its suppliers or delivers to the administrative offices and execution of works, and the person in charge of the warehouse must control all these inputs and outputs,



allowing the entity to maintain an optimal level of inventory for the proper development of work activities that benefit the community (Ferrara et al. 2021).

In the words of Citro et al. (2019) transparency is the principle and exhibition to the inhabitants of all the exercises that are carried out by the functions performed by the authorities, officials and municipal servants.

Likewise, it can be said that transparency is the legal, political, ethical and organizational framework of government management which evaluates and controls all the actions of the members of the local government (Pérez et al. 2021).

The recognition and guarantee of the right is immersed in transparency in the public sector, which is the open data policy where citizens can access it, without so much bureaucracy, of course respecting and complying with the protocols established by the legal framework. (Harrison, 2020).

The function of the guarantor body, where the quality of the information is vital to demonstrate that the institution is totally transparent, the control body must execute the control of all public transparency that the municipalities upload, and must have training programs on how to use advertising in the mass media, since, through this, the vast majority of citizens will become aware of all the activities that are being carried out (Gil et al. 2020).

Institutional performance, at this point mention is made of the management tools that are handled in the institutional budget, and the authorities must pay attention to all the public information that will be published in the technological tools, for this the contributions of the employees must be considered, since, through this, the identification of the workers with the entity is achieved, achieving a good working environment and performance. (Harrison, 2020).

User satisfaction, this refers to the level of usefulness of the information that the user has requested from the entity, this shows whether the institution has complied with delivering the right information at the right time to citizens, and should address the complaint process with clarity in the language and data that have been captured in the documents. (Harrison, 2020).

Ethics is the relationship of trust between public servants and management, taking into account the perception of the personnel at the time of executing their work activities, and the use of goods and services in a correct manner, in accordance with legal standards, where political activity does not interfere in the quality of work and its values, since, through this, the correct use of economic resources is achieved and therefore real and understandable data can be published for users (Ferreira et al. 2016).

Public transparency is supported by the theory of responsibility as an ethical imperative of Jonas and Hans (1998) revealing that the maximum expression of this theory are the

principles of good, duty and being, having as shortage to institute the immediate analogy as circular between the dogma and guarantee of the right, position of the guarantor organ, institutional occupation, user complacency and ethics, likewise, metaphysics, deontology and morality must be taken into account, since, if this is ignored it will be doomed to its own emptiness, having as a result the increase of corruption.

Transparency has become a difficulty for the national State, taking the decision to privatize some government services, which has brought inconveniences in the national economy and in the claim of citizens, because now the fees of the procedures are high, although they still show deficiencies that, when they belonged to the Government (Reig et al. 2021).

Positivism and postpositivist were considered because both aim to explain the phenomena that are being studied in this work, because this ultimately allows to predict it until it is controlled, where Comte and Durkheim (2011) In the case of Comte and Durkheim, it is proposed that the investigation of social phenomena must be scientific, and all things or phenomena can be measured by scientific methods.

## **RESEARCH METHODOLOGY**

This research was of the applied, correlational, non-experimental, cross-sectional type. Applied because it allows establishing methods that can satisfy recognized and specific needs through scientific knowledge. Correlational because it was designed to measure the link between these study variables by Kendal's Tau correlation coefficients and Spearman's Rho.

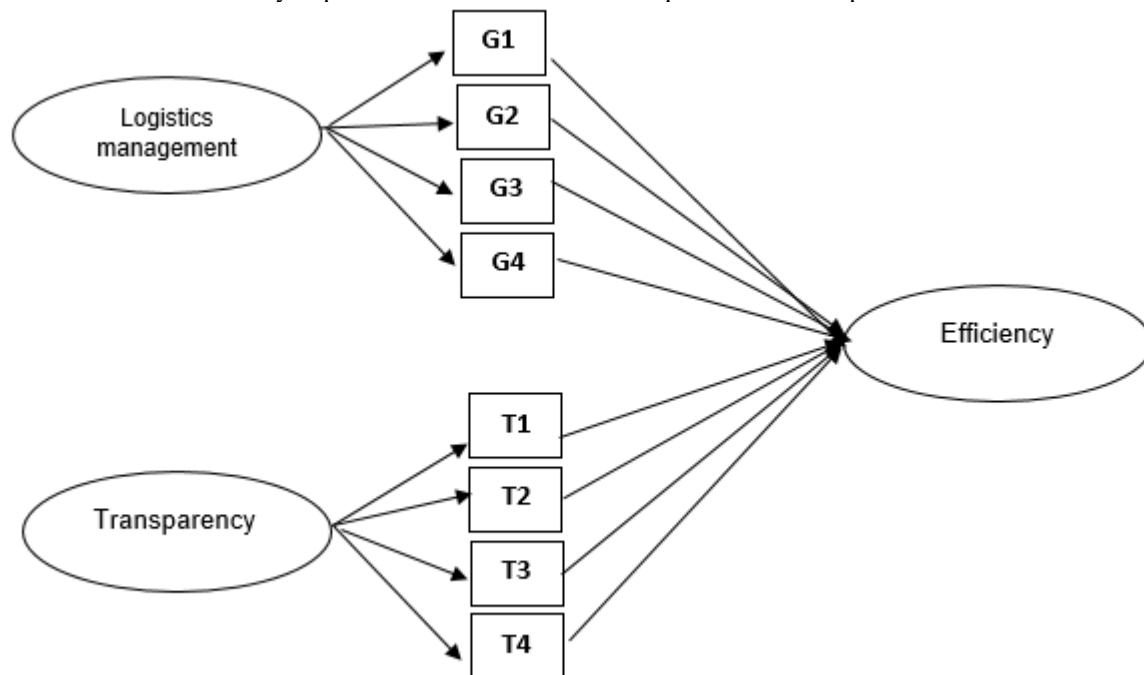
Non-experimental because time is split during data collection. Cross-sectional, because the data collected is done at a single point in time, only once, and is able to describe the incidence of the variables and their interrelationships at a given moment in time.

The research element was the public sector in Peru and consisted of 90 civil servants working in the public sector.

The hypothesis of this research is that logistics management and transparency contribute to the reduction of corruption in procurement and in the process of attending to requirements. In order to contribute to the analysis of the correlation, a structural model was designed in advance and is included in Figure 1.



Figure 1 Structural model made up of the variables logistics management and transparency, which promote efficiency in procurement and attention to requirements in the public sector.



Note: Own elaboration (2022)

The survey was used. It is the tool that allows data to be collected in real time. (Chávez, 2017). The questionnaire was used, consisting of 24 items in each variable, reaching a total of 48 items, with respect to logistics management the survey was obtained from the research work of Parodi (2017) and public transparency was obtained from Florián's (2019).

The questionnaire is the element that allows obtaining data through a certain number of questions applied to the study sample. (Sánchez & Reyes, 2017).

In addition, since it is a series of coherently worded questions, considering that the previous plans are organized, sequenced and structured, the purpose is that the answers provide us with all the necessary information that allows us to achieve accurate results.

In terms of instrument verification, three professional experts with master's degrees and rich professional experience in the surveyed objects will perform the verification. The content validity of the instrument was applied through Aiken's validity with judges, with the help of three experts knowledgeable in these research topics.

The content validity of the instrument was applied through Aiken's validity with judges, with the help of three experts knowledgeable in these research topics. The results obtained indicate a good level of content validity of the instrument (weighting average = 98.45), guaranteeing its application. Similarly, the reliability of the tool was obtained through Cronbach's Alpha index, which allows knowing the relevance of the tool proposed for the

project, 15 workers of the Regional Health Directorate were sampled to measure the reliability of the public transparency instrument.

We proceeded to adapt the questionnaires to the reality of this work, then we proceeded to request the validation of experts, jointly submitting the request to the entity for the respective authorization, as soon as it was achieved, the questionnaires were applied, which allowed us to achieve the results in this research.

In order to develop the diagnostic objectives, the descriptive statistical method was used by means of tables and graphs, allowing the level of perception of the workers on the variables and each of their dimensions to be evidenced. Likewise, Cronbach's Alpha was used to check the reliability of the items formulated in each dimension, since this allows verifying the degree of confidence of the questions formulated (Quezada, 2015).

## RESULTS AND DISCUSSION

The data show that logistics management in the Regional Health Directorate is regular, since it reached 48% at this level. Likewise, it can be seen that the distribution dimension reached a higher percentage at the deficient level with 60%, followed by the storage dimension with 59% at the deficient level, these data reveal that the Annual Contracting Plan is not fully complied with due to a lack of knowledge of the technical requirements of the legal norms.

The findings of this research are defended by the theory of Del Aguila (2019) because the researchers to conclude that there is significant evidence that open government significantly affects Change Management ( $Rho = 0.846$ ;  $p < 0.05$ ). Also, Hellani et al. (2021) concluded that the indicators that affect and damage the trust of citizens in the little or no transparency of economic data that the authorities of the public entities have been executing, being one of the factors by which logistics has been affected.

Likewise, Benito et al. (2021) concluded that the lack of emphasis at the time of disseminating information on issues related to public management is causing complaints from citizens, because they consider that corruption is being committed in the municipalities.

Goldratt's (1981) management by restrictions, because it involves the restrictions evidenced in purchasing management, supply management, storage and distribution, being necessary that the planning, organization, evaluation and control of complex systems, must work efficiently with the available resources.

Also, everything must be clear, because this will allow us to make good decisions, thus avoiding the misappropriation of funds and waste of raw materials and goods that are used inappropriately in the offices of the municipalities.

Table 1 Level of logistics management and procurement management, supply management, warehousing and distribution

Sections	Deficient		Regular		Efficient	
	f	%	f	%	f	%
Logistics management	39	43	43	48	8	9
Shopping	50	56	26	29	14	15
Supply	49	54	34	38	7	8
Storage	53	59	4	4	33	37
Distribution	54	60	36	40	0	0

Note: Own elaboration (2022)

The data show that public transparency in the Regional Health Directorate is deficient since it achieved 57% at this level. It can also be seen that the institutional performance dimension achieved a higher percentage at the deficient level with 70%, followed by the dimension function of the guarantor body with 67% at the deficient level, followed by the dimension user satisfaction with 66% at the deficient level.

This is followed by the dimension of recognition and guarantee of the right because it obtained 61% in the deficient level and finally the ethical dimension with 51% in the deficient level, thus revealing that despite the existence of policies and protocols established on the quality of information to be published, the entity has not been complying with the dissemination of such information in the virtual platforms that the institution has.

Werner and Golinska (2021) as they state that it is the degree to which an organization implements modern logistics solutions to improve the performance of each of its activities that it executes on a daily basis allowing the stability and proper functioning of the entity's areas.

Table 2 Level of public transparency and the recognition and guarantee of the right, role of the guarantor body and institutional performance.

Sections	Deficient		Regular		Efficient	
	f	%	f	%	f	%
Public transparency	51	57	34	37	5	6
Recognition and guarantee of the right	55	61	18	20	17	19
Role of the guarantor body	60	67	10	11	20	22
Institutional performance	63	70	19	21	8	9
User satisfaction	59	66	20	22	11	12
Ethics	46	51	27	30	17	19

Note: Own elaboration (2022)

It can be seen that 92.3% of the workers revealed that logistics management is deficient and that they perceive public transparency at the same level, while 7.7% perceive logistics management and public transparency to be regular. Likewise, the contingency coefficient of the kendall's Tau-b test statistic is  $T = 0.648$ , a value that is less than 1% of standard significance ( $P < 0.01$ ), with respect to the correlation a value of  $= 0.673$  (considerable positive) was reported.

Demonstrating that logistics management has a highly significant influence on transparency in the public sector Peru.

Likewise, Rustian et al. (2021) indicated that supply management in public entities, here it is stated that it is the annual contracting plan that the government entity possesses having to comply with all the principles that govern all the contracting that is needed in the institution or is simply necessary to achieve the common welfare.

On the other hand, Ferrara et al. (2021) stated that the storage, at this point refers to all the rules that control, regulate and audit all the supply processes and the control of the stock of goods held by the entity, which must be for the exclusive use of the activities that the institution has as its nature.

Table 3 Contingency table of logistics management and public sector transparency in Peru

Logistics management	Public transparency			Total	
	Deficient	Regular	Efficient		
Deficient	f	36	3	0	39
	%	92,3%	7,7%	0,0%	100,0%
Regular	f	15	26	2	43
	%	34,9%	60,5%	4,7%	100,0%
Efficient	f	0	5	3	8
	%	0,0%	62,5%	37,5%	100,0%
Total	f	51	34	5	90
	%	56,7%	37,8%	5,6%	100,0%

Sig. = 0.00 (p<0.01) Sperman's Rho = 0.673 Kendall's tau-b = 0.648

Note: Own elaboration (2022)

The contingency coefficient of the kendall's Tau-b test statistic is  $T= 0.613$ , a value that is less than 1% of standard significance ( $P < 0.01$ ), with respect to the correlation a value of = 0.650 (considerable positive) was reported.

Likewise, the contingency coefficient of the kendall's Tau-b test statistic is  $T= 0.637$ , a value that is less than 1% of standard significance ( $P < 0.01$ ), with respect to the correlation a value of = 0.658 (significant positive) was reported. Similarly, the contingency coefficient of the kendall's Tau-b test statistic is  $T= 0.528$ , a value that is less than 1% standard significance ( $P < 0.05$ ), with respect to correlation a value of = 0.551 (significant positive) was reported.

In addition, the contingency coefficient of the kendall's Tau-b test statistic is  $T= 0.530$ , a value that is less than 1% standard significance ( $P < 0.05$ ), with respect to correlation a value of = 0.542 (significant positive) was reported. Likewise, the contingency coefficient of the kendall's Tau-b test statistic is  $T= 0.622$ , a value that is less than 1% standard significance ( $P < 0.05$ ), with respect to correlation a value of = 0.651 (significant positive) was reported.

Also, the contingency coefficient of the kendall's Tau-b test statistic is  $T = 0.581$ , a value that is less than 1% standard significance ( $P < 0.05$ ), with respect to the correlation a value of  $= 0.608$  (significant positive) was reported. Also, the contingency coefficient of the kendall's Tau-b test statistic is  $T = 0.500$ , a value that is less than 1% standard significance ( $P < 0.05$ ), with respect to correlation a value of  $= 0.538$  (significant positive) was reported.

Similarly, the contingency coefficient of the kendall's Tau-b test statistic is  $T = 0.542$ , a value that is less than 1% standard significance ( $P < 0.05$ ), with respect to correlation a value of  $= 0.580$  (significant positive) was reported. In contrast, the contingency coefficient of the kendall's Tau-b test statistic is  $T = 0.568$ , a value that is less than 1% standard significance ( $P < 0.05$ ), with respect to correlation a value of  $= 0.604$  (significant positive) was reported.

Citro et al. (2019), as they reveal that transparency is the principle and exhibition to the villagers of all the exercises that are carried out by the functions executed by authorities, officials and public servants.

Ferrara et al. (2021) revealed that procurement management is the requirements made by employees and users, through orders that must be met in a timely manner, at the right time and place.

Table 4 Summary of hypothesis tests

Causal relationship	Kendall's Tau-b	Spearman's Rho	Probability (p-value)	Decision	Significance
Logistics management and public transparency	0.648	0.673	0.000<0.01	Accepted Hi	The correlation is highly significant
<b>Relationship between the dimensions of the logistics management variable and the public transparency variable</b>					
Procurement - Public Transparency	0.613	0.650	0.000<0.01	Accepted Hi	The correlation is highly significant
Procurement - Public transparency	0.658	0.637	0.000<0.01	Accepted Hi	
Storage - Public transparency	0.551	0.528	0.000<0.01	Accepted Hi	
Distribution - Public transparency	0.528	0.551	0.000<0.01	Accepted Hi	
<b>Relationship of the logistics management variable and the dimensions of the public transparency variable</b>					
Recognition and guarantee of rights - Logistics management	0.622	0.651	0.000<0.01	Accepted Hi	The correlation is highly significant
Role of the guarantor body - Logistics management	0.581	0.608	0.000<0.01	Accepted Hi	
Institutional performance - Logistics management	0.500	0.538	0.000<0.01	Accepted Hi	
User satisfaction - Logistics management	0.542	0.580	0.000<0.01	Accepted Hi	

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Ethics - Logistics management	0.568%	0.604	0.000<0.01	Accepted Hi
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Note: Own elaboration (2022)

## CONCLUSIONS

The main limitations encountered in the development of this article were the absence of free academic information, as well as the lack of access to information and the weak support from the public entity that was studied, but thanks to the support of professional colleagues in the sector, these limitations could be overcome.

And that the distribution, in this case refers to the entry and exit of goods that the company acquires from its suppliers or delivers to the administrative offices and execution of works, the person responsible for the warehouse must control all these inputs and outputs, allowing the entity to maintain an optimal level of inventory for the proper development of work activities that benefit the community.

It is suggested that the internal control office verify compliance with the legal bases and policies of the institution in all aspects of logistics management and that the processes carried out are published immediately on the institution's digital platforms, as this will achieve very high levels of public transparency, thus avoiding administrative sanctions and even legal proceedings in the short or long term.

Likewise, it is proposed that through the human resources office a training and orientation plan be developed on the technical procedures for purchases, storage and supply, since this will improve the distribution process of the goods acquired, since they have complied with the due process required by Peruvian regulations.

It is also suggested to develop a plan to evaluate the performance and regulatory compliance of lower-level officials, as this will reduce the risk of not recognizing and guaranteeing the rights of users, since this measure will promote ethics in every work environment of the institution, benefiting not only the current management, but also helping to achieve user satisfaction, since institutional performance will be efficient for the benefit of the entire community.

In addition, it is proposed to consider the technical requirements that state laws require on purchases before proceeding to acquire the required goods as this avoids the risk of being prosecuted for embezzlement or misuse and misallocation of economic resources, also, they must meet the deadline set in the TUPA as requested by the departments of the entity.

And above all, they must comply reliably with the recognition and guarantee of the right through the function of the guarantor body and a good institutional performance because this



will achieve user satisfaction since it would be encouraging and promoting ethics in all departments of the entity, thus achieving an efficient logistics management and according to the needs of the institution itself.

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