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Influence of digital marketing on the quality of service in the hotel sector in a region of Peru

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Abstract

The objective of the research was to determine the influence of digital marketing on the quality of service of the hotel sector in the Tacna region - Peru; where the type is basic, of explanatory scope, non-experimental design, the population is 139,876 Peruvian tourists and the sample is 95 people. The technique is the survey, the instrument is the questionnaire, the method is hypothetical - deductive and the approach is quantitative. It was obtained that 87.4% of tourists consider the use of digital marketing by hotels to be regular, the most important dimension being "Feedback" and the one focused on improving "Loyalty"; and 49.5% perceive the quality of hotel service to be adequate, the most important dimension is "Reliability" and the one focused on improving "Tangibles". It is concluded that digital marketing has a significant influence on the quality of service of the hotel sector in the province of Tacna since a chi-square value equal to 143.746 ($p = 0.000$) was obtained, and a Nagelkerke coefficient = 0.972; there is also the influence of the dimensions of the variable "Digital marketing" on the variable "Quality of service".

Keywords: *Digital marketing, service quality, hotel sector.*

Introduction

Benítez (2012) points out that most businesses in the world have a high level of technological intervention where the Internet is essential for their development; he complements this by highlighting that one of the factors that affect the positioning of companies is their level of participation in social networks, having their website, the use of virtual stores, consumer databases, customer management tools, among others.

The main objective of organizations is to increase their market share, for which they must necessarily increase the volume of sales of their products and/or services, and for this, a key aspect is to increase their levels of investment in how to massify their offers, which allows their customers and potential customers, get to know about their offers and can make transactions. It is at this point that the application of digital marketing strategies is necessary to achieve the goal of increasing the volume of sales since if they are not applied, in this globalized reality in which companies live, they run the risk of closing in the short term.

What has been described in the previous paragraphs is specifically evidenced in the hotel industry, where the tourist is increasingly demanding, which has forced hotel owners to implement strategies that allow them to be more competitive and remain a good option in the market. In this regard, is what is described by Mora et al. (2018), who point out that hotels in Bogota have necessarily had to evolve and innovate quickly to serve customers, and that digital marketing has played a priority role in generating a more direct communication that allows the person to be more aware of the details of the offers through the online service.

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In Peru, the Ministry of Foreign Trade and Tourism (2016) published the National Strategic Plan for Tourism towards 2025, where it is described that there is a sustained increase in the flow of tourists visiting the country, but the same could be significantly higher, but this does not occur despite the cultural richness and tourism potential, because visitors seeking accommodation through the advantages of technology. This implies that not all businessmen are prioritizing investment in strategies related to digital marketing to inform about the benefits of the services they offer to potential tourists; therefore, this directly affects the increase in the flow of potential tourists and thus the generation of income and direct and indirect jobs in the country.

In Tacna, something similar happens, since it is noted that only 4- and 3-star hotels have invested in their virtual sites where they disseminate the characteristics of the services offered and only some 2-star hotels. Therefore, there is no prioritization of the use of the benefits of digital marketing as a tool to potentially improve the level of income, generating that potential tourists know details of the diverse range of establishments to stay overnight in the region; this adheres to what is specified by Cañi (2016) who concludes in his research that 43.8% of the people who visit the city consider the quality management of the hotel services offered to be of regular level, being mainly of Chilean nationality, where the reasons for the visit are shopping in the markets and flea markets, medical care, tasting the local gastronomy, among others.

Therefore, if the use of digital marketing is not prioritized by the lodging establishments as an important tool to encourage potential tourists who wish to visit this region of Peru, it will continue to affect the generation of more direct and indirect jobs. In addition, it is necessary to prioritize the implementation of management focused on the quality of service, which allows visitors to the city to return and generate adequate comments in their environment about the experience.

Based on this, the main objective of this research is to determine the influence of digital marketing on the quality of service in the hotel sector in a region of Peru. Its specific objectives are to analyze the influence of the flow, functionality, feedback and loyalty of digital marketing on the quality of service that characterizes these establishments. Regarding the general hypothesis, it is proposed that there is an influence of digital marketing on the quality of service that characterizes the tourist who stayed in hotels in the region of Tacna - Peru.

Regarding the theoretical bases of the variable “Digital Marketing”, the definition made by the American Marketing Association (2018) stands out, highlighting that it is an organizational function, which involves the creation, communication and exchange of a set of offers that are valued by customers and society, being. Therefore, the key to identifying the main desires and needs of the person is used by suppliers to generate satisfiers. Editorial Vértice (2010) defines it as a system that is mainly based on the interaction and communication between the supplier and the potential customers, to generate a commercial transaction; finally, Selman (2017) points out that it encompasses a set of marketing strategies, which are mainly developed through the internet, with the purpose that a user can become aware of the existence of the organization and its various offers of products and/or services, whose information contributes to its acquisition decision.

Santillán and Rojas (2017) describe the main tools that comprise digital marketing as Web or blogs, whose main purpose is to attract users and achieve that they are customers. Web or blog, whose main purpose is to attract users and make them customers, for which they focus on generating value through the content they show. The same can be complemented with social networks, forums, videos, and others, which contribute to giving greater visibility to the website; search engines, which allow internet

users to find concepts or content related to the reason for their search, but if you want our website or blog, appears as one of the first options in search engines, necessarily some actions must be developed to position or pay; display advertising, is the billboard that is used in digital media, that is, it is the banners or ads, which may have different presentations and combination of colors, to attract the attention of users; email marketing, it is the mailbox, which has been adapted and combines very well with other strategies, to transmit catalogs, newsletters, others; and social networks, which aims to disseminate content that the entity wants to massify, in generating a brand community, in customer service.

For the analysis of the level of use of digital marketing in the units of study of this research, it has been considered the basis of relationship marketing, which argues that for there to be a bond that captivates the customer and is sustained for a long time, the company - customer relationship should not only be commercial and reach the post-sale service, but must be achieved to satisfy the customer and his loyalty to the entity (where the full service is the purpose), and for this CRM (Customer Relationship Management) tools should be used to generate management focused on individualizing the attention to customers.

In this regard, the publication of ANETCOM (2007) is highlighted, which describes the work of Paul Fleming, who is an expert in Digital Marketing and social media, who ensures that the 4 “P” (Product, Place, Price and Promotion) of traditional marketing, are currently reflected in the 4 “F” (Flow, Functionality, Feedback and Loyalty) that allow analyzing digital marketing, which is considered as the dimensions in this research:

- a) Flow: It represents the navigation that a user makes through the institutional web page, which is attracted by the interaction and the added value (multiplatform concept); its indicators are as follows:
 - Eye-catching website: It implies that the company's portal generates a visual impact and the respective attention of customers during their visit.
 - Differentiation: The company's portal must be significantly different from others, especially those of the competition.
 - Variety of advertising: It implies that the company's portal should be characterized by its variety in advertising themes.
 - Interesting navigation: It implies that it should be pleasant to navigate through the company's page, a different experience.
 - Image quality: Implies that there is the sharpness of the company's page, variety of colors and images, and others.
- b) Functionality: Represents the clarity and usefulness of the digital media that make up the website, which prevents the abandonment of the page for which the navigability must be intuitive and easy for the user; its indicators are as follows:
 - Utility: Implies that the customer perceives that the visit to the company's website contributes to the transaction.
 - Support in the purchase decision: The company's web page is key in the purchase decision.
 - Updated structure: The web page has an order and structure that facilitates its navigation.

- Online communication: It implies that the website promotes interaction with customers.
 - Online shopping: The website should provide the customer with the facilities to make a purchase.
- c) Feedback: Represents the feedback that the institution provides to the user, which evidences interactivity, and helps to consolidate the user's trust:
- Quality difference: It implies that the customer can value the company and its products and/or services.
 - Level of contact: It implies that there is fluid contact between the company and the clients.
 - The opportunity of attention: It implies that the web page is a mechanism that facilitates the interaction with the client, in their buying mood.
 - Attractive design: It implies that the website is interesting to visit, where its design stands out.
- d) Loyalty: It implies the formalization of solid relationships between the institution and the user, which generate commitment and loyalty, due to the genuine interest in satisfying the needs; its indicators are:
- Dialogue: Where priority is given to constant interaction with customers, to let them know the news of what the company offers, and listen to their contributions and criticisms.
 - Relationship building: It implies generating a strong bond of interaction with customers.
 - Information: Implies that frequent information should be provided to the customer to help him/her decide on what the company offers.
 - Customer benefits: The relevance of being a customer of the company should be made clear, and promote more and more benefits for the customer.
 - Trust: Always complying with the company's offer generates the customer's trust in the company.

Regarding the theoretical bases of the variable “Quality of service”, the definition made by Rey (1999) stands out, who points out that it originates in the difference between perceived quality and objective quality, which is generated based on the customer's judgment of the product, which is formed based on the existence of standards, thus implying compliance with what is expected; Grönroos (1984) associates it with the customer's acceptance of a given product, after comparing his expectations with his reactions; Parasuraman et al. (1988) associate it with the existence of a non-conformity, which appears as the discrepancy between what is expected and what is perceived; and Cronin and Taylor (1992) point out that their analysis is based on the perceptions of consumption of the product and/or service.

Ballón (2016) researched on the quality of service in the hotel sector, from which the following characteristics of this sector stand out: Intangibility, it implies that the hotel service cannot be touched, which implies that it is required to take knowledge of opinions of people who have already lived the experience, to have reference about its service, and this is complemented with the advertising campaigns applied by those responsible for the hotels; at the international level, the service is cataloged in standards (stars), which implies that the more stars the hotel has, it is expected that the service is much better; inseparability, which means that in a hotel the product and the service are provided simultaneously, where the empathetic treatment of the staff is very important; variability, which implies that the service is standardized, therefore there should be no notable difference between one hotel and another, if they have the same number of stars; and seasonality, which implies that the service provided by the hotels is adapted to the seasons, allowing them to offer comfort at different times of the year.

Parasuraman et al. (1988) propose a five-dimensional model for the analysis of service quality, which are the ones used in this research:

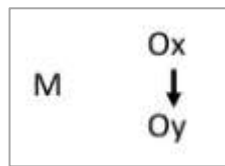
- a) Reliability: This is the confidence that the entity radiates to its clients and the environment; the indicators are as follows:
 - Fulfills what was offered: It implies that the company complies promptly with what was offered to the client.
 - Meets deadlines: Refers to the fact that the deadlines assumed by the company are met.
- b) Response capacity: This implies complying with the offer, promptly and in the expected quantity; the indicators are as follows:
 - Willingness: Implies that the staff is always willing to support the customer.
 - Timeliness: Where we seek to meet the customer's requirements in advance.
- c) Security: It is the guarantee offered by the entity to its customers that they are not being surprised, and that everything offered is what is being traded; the indicators are as follows:
 - Trust: It implies that the company complies with its offer so that there is confidence in it.
 - Support received: Implies that priority is given to ensuring that the client receives the necessary support to meet their expectations.
- d) Empathy: The ability of the personnel to listen to the clients and put themselves in their place to provide alternative solutions to their expectations:
 - Individualized treatment: Implies that the treatment should be preferential and personalized.
 - Flexible schedules: Implies that the hours of operation are adapted to the customer's purchasing needs.
- e) Tangible assets: This includes the infrastructure and equipment owned by the entity, which allows it to provide a service under market requirements; the indicators are as follows:
 - Technology: The company has the technological aspects that facilitate adequately reaching the customer.

- Infrastructure: Implies that the company has the environment and other facilities to meet the customer's requirements.
- Appearance: Implies that the personnel has an appropriate appearance and neatness.

Specifically, to collect field data, the criteria of Cronin and Taylor (1992) were applied, pointing out that it is best to consider only customer perceptions since expectations tend to be subjective.

MATERIAL AND METHODS

Regarding the approach, it was quantitative, since closed alternative questions were used, and research hypotheses were contrasted; regarding the type, it is specified that it is pure or basic since it sought to contribute to the already existing knowledge; Regarding the level of research, it is explanatory, since the behavior of the variables was analyzed, to then seek to determine their causal relationship; it is specified that the design was non-experimental, that is, no variable was deliberately altered, and the data were collected through cross-sectional analysis, i.e. at a point in time (Hernández et al., 2014); the scheme being:



- M: Sample of tourist customers.
- Ox: Independent variable = Marketing digital.
- Oy: Dependent variable = Quality of service.
- ↓: Influence of Ox on Oy.

The following table shows the dimensions and indicators considered for the analysis of the variables under study.:

Table 1

Table of operationalization of variables

VARIABLES	DEFINITION	DIMENSIONS	INDICATORS	SCALE
Independent variable: Digital marketing	Set of marketing strategies, which are developed mainly through the internet, to make a user aware of the existence of the organization and its various product and/or	1. Flow	Eye-catching website. It makes a difference. Variety of advertising. Interesting navigation. Image quality.	Ordinal (Likert of 05 options)
		2. Functionality	Utility. Support in the purchase decision. Updated structure. Online communication.	

	service offerings, whose information contributes to their purchase decision (Selman, 2017).	3. Feedback		Online shopping. Differentiates quality. Level of contact. Opportunity of attention. Attractive design.	
		4. Loyalty		Dialogue. Relationship building. Information. Customer benefits. Trust.	
Dependent variable: Quality of service	The difference between perceived quality and objective quality, which is generated based on the customer's judgment of the product, which is formed based on the existence of standards, thus implying compliance with expectations (Rey, 1999).	1. y	Reliability	Delivers what is offered. Meets deadlines. Predisposition. Opportunity. Confidence. Support received. Individualized treatment. Flexible schedules.	Ordinal (Likert of 05 options)
		2.	Answer capacity	Technology, Infrastructure, Appearance.	
		3.	Safety		
		4. y	Empath		
		5. s	Tangible		

Source: Own elaboration

The population has been identified considering as a source, data from the Ministry of Foreign Trade and Tourism, which published that in 2018 (before the Pandemic), 28.9% of tourists who visited the country (4.4 million) entered through Tacna. Therefore, it is 1,271. The study population is 139,876 tourists of Peruvian nationality, since in the year 2021 the influx of foreign tourists is almost null in this region (due to the closing of borders due to the presence of the Covid-19 pandemic), it was decided to interview nationals. The following finite population formula was used to determine the sample, and with the following assumptions: 95% confidence ($Z = 1.96$); 10.00% error (e); conservative 50% probability of occurrence (P); and population of 139,876 (N).

$$n = \frac{N z_{\alpha/2}^2 P(1-P)}{(N-1)e^2 + z_{\alpha/2}^2 P(1-P)}$$

$$139,876 * 1.96^2 * 0.5 (1 - 0.5)$$

$$n = \frac{(139,876 - 1) * 0.10^2 + 1.96^2 * 0.5 (1 - 0.5)}{}$$

$$n = 95 \text{ Peruvian tourists.}$$

The number of tourists to be surveyed was 95, which were selected non-randomly, since the inclusion criterion was that they must be over 18 years of age, be Peruvian nationals, and have spent at least one night in the province of Tacna in a 3- or 4-star hotel, and have a minimum of one night in a 3- or 4-star hotel.

Regarding the data collection technique, it is specified that the survey was used, which is applied mainly to collect information from individuals who are the object of the study, on aspects such as personal aspects (sex, age, marital status, others), specific opinions on the study variable, beliefs and expectations, knowledge, behaviors, etc. (Hernández et al., 2014). Regarding the instruments, it is detailed that the questionnaire was used, which allows reflecting the operationalization of the variables through the items used to collect information from the individuals who are the subject of the research, for which face-to-face methods such as personal interview, by telephone, via email, others may be used (Hernández et al, 2014), from where: Questionnaire on the perception of digital marketing and quality of service in the hotel sector of Tacna.

The instruments are made up of five response options based on the Likert scale: Never or strongly disagree (value = 1), rarely or disagree (value = 2), sometimes or indifferent (value = 3), almost always or agree (value = 4) and always or strongly agree (value = 5). Regarding the validation of the instruments, the Expert Judgment criterion was used, with an average score of 95%; for reliability, Cronbach's Alpha statistic was applied, and a value of 0.876 (variable "Digital Marketing") and 0.855 (variable "Quality of Service") was obtained, which implies that they are adequate (George and Mallery, 2003). For the preparation of the results tables, since these are qualitative variables, three levels were used, distributed with equal amplitude based on the Likert rating: Inadequate (1.00 - 2.33), fair (2.34 - 3.66) and adequate (3.67 - 5.00).

RESULTS

Regarding the independent variable "Digital marketing", it was found that 87.4% of Peruvian tourists who visited the city of Tacna in 2021 considered the use of digital marketing as a strategy that allows tourists to decide to stay and receive more friendly information about the benefits of the service to be regular, 6.3% said it was inadequate, and 6.3% said it was adequate.

Table 2

Independent Variable – Digital Marketing

Level	Tourist	Percentage
Inadequate	6	6.3
Regular	83	87.4
Adequate	6	6.3
Total	95	100.0

Source: Questionnaire "Digital Marketing"

Below is a summary of the descriptive behavior of the dimensions of the “Digital Marketing” variable, of which the most outstanding is “Feedback” and the one focused on improving is “Loyalty”.

Table 3*Independent Variable – Digital Marketing (by dimension)*

	Dimension	Tourist	Percentage
Flow	Inadequate	14	14.7
	Regular	51	53.7
	Adequate	30	31.6
Functionality	Inadequate	14	14.7
	Regular	40	42.1
	Adequate	41	43.2
Feedback	Inadequate	5	5.3
	Regular	49	51.6
	Adequate	41	43.2
Loyalty	Inadequate	35	36.8
	Regular	53	55.8
	Adequate	7	7.4

Source: Questionnaire “Digital Marketing”

Regarding the dependent variable “Quality of service”, it was found that 49.5% of Peruvian tourists who visited the city of Tacna in 2021 considered the quality of service that characterizes the hotels to be adequate, 47.4% say it is regular, and 3.2% say it is inadequate.

Table 4*Dependent variable – Quality of service*

	Level	Tourist	Percentage
	Inadequate	3	3.2
	Regular	45	47.4
	Adequate	47	49.5
	Total	95	100.0

Source: Questionnaire “Quality of Service”

The following is a summary of the descriptive behavior of the dimensions of the variable “Quality of service”, where the most outstanding is “Reliability” and the one focused on improving is “Tangibles”.

Table 5*Dependent variable - Quality of service (by dimension)*

	Dimension	Tourist	Percentage
Reliability	Inadequate	0	0.0
	Regular	45	47.4
	Adequate	50	52.6
Responsiveness	Inadequate	5	5.3
	Regular	43	45.3

Security	Adequate	47	49.5
	Inadequate	4	4.2
	Regular	43	45.3
Empathy	Adequate	48	50.5
	Inadequate	3	3.2
	Regular	46	48.4
Tangibles	Adequate	46	48.4
	Inadequate	7	7.4
	Regular	43	45.3
	Adequate	45	47.4

Source: Questionnaire “Quality of Service”

The general hypothesis is: Digital marketing significantly influences the quality of service in the hotel sector in the Tacna region - Peru, in the year 2021.

The ordinal logistic regression report was obtained, from where the chi-square value = 143.746 and $p = 0.000$, since “p” is less than 5% significance, it has that digital marketing manages to influence the quality of hotel service; Furthermore, the value of the Nagelkerke coefficient = 0.972, which implies that 97.2% of the variations in the level of service quality are caused by digital marketing; therefore, digital marketing has a significant influence on the quality of service in the hotel sector.

Table 6

General hypothesis testing

Model fit information

Model	Logarithm of the likelihood -2	Chi-square	gl	Sig.
Intersection only	143.746			
Final	0.000	143.746	28	0.000

Pseudo R square

Cox and Snell	0.780
Nagelkerke	0.972
McFadden	0.933

Source: Both questionnaires

The specific hypothesis N° 1 specifies: The digital marketing flow has a significant influence on the quality of service in the hotel sector in the Tacna region - Peru, the year 2021.

From where the chi-square value = 84.545 and $p = 0.000$ since “p” is less than 5% significance, the flow manages to influence the quality of hotel service; in addition, there is the value of the Nagelkerke coefficient = 0.734, which implies that 73.4% of the variations in the level of service quality are originated by the flow; therefore, the digital marketing flow significantly influences the quality of service of the hotel sector.

Table 7*Specific hypothesis test No. 01**Model fit information*

Model	Logarithm of the likelihood -2	Chi-square	gl	Sig.
Intersection only	106.505			
End	21.959	84.545	12	0.000

Pseudo R square

Cox and Snell	0,589
Nagelkerke	0,734
McFadden	0,549

Source: Both questionnaires

Specific hypothesis No. 2 states: The functionality of digital marketing significantly influences the quality of service in the hotel sector in the Tacna region - Peru, the year 2021.

From where the chi-square value = 86.814 and $p = 0.000$ since “p” is less than 5% significance, it is found that the functionality manages to influence the quality of hotel service; in addition, we have the value of the Nagelkerke coefficient = 0.746, which implies that 74.6% of the variations in the level of service quality are caused by the functionality; therefore, it is found that the digital marketing functionality significantly influences the quality of service in the hotel sector.

Table 8*Specific hypothesis test No. 2**Model fit information*

Model	The logarithm of the likelihood -2	Chi-square	gl	Sig.
Intersection only	106.844			
End	20.030	86.814	8	0.000

Pseudo R square

Cox and Snell	0.599
Nagelkerke	0.746
McFadden	0.563

Source: Both questionnaires

Specific hypothesis N°. 3 states: Digital marketing feedback has a significant influence on the quality of service in the hotel sector in the Tacna region - of Peru, in the year 2021.

Where the chi-square value = 87.319 and $p = 0.000$ since “p” is less than 5% significance, we have that the feedback manages to influence the quality of hotel service; in addition, we have the value of the Nagelkerke coefficient = 0.749, which implies that 74.9% of the variations in the level of service quality

are originated by the feedback; therefore, we have that the digital marketing feedback significantly influences the quality of service of the hotel sector.

Table 9*Specific hypothesis test No. 3**Model fit information*

Model	Logarithm of the likelihood -2	Chi-square	gl	Sig.
Intersection only	111.003			
Final	23.684	87.319	8	0.000

Pseudo R square

Cox y Snell	0.601
Nagelkerke	0.749
McFadden	0.567

Source: Both questionnaires

The specific hypothesis No. 04 states: Digital marketing loyalty has a significant influence on the quality of service in the hotel sector in the Tacna region - Peru, in the year 2021.

Where the chi-square value = 103.027 and $p = 0.000$ since “p” is less than 5% significance, loyalty marketing can influence the quality of hotel service; in addition, the value of the Nagelkerke coefficient = 0.825, which implies that 82.5% of the variations in the level of service quality are caused by loyalty marketing; therefore, the digital marketing loyalty marketing has a significant influence on the quality of service in the hotel sector.

Table 10*Specific hypothesis test No. 04**Model fit information*

Model	Logarithm of the likelihood -2	Chi-square	gl	Sig.
Intersection only	115.825			
Final	12.797	103.027	13	0.000

Pseudo R square

Cox and Snell	0.662
Nagelkerke	0.825
McFadden	0.668

Source: Both questionnaires

DISCUSSION

The research carried out allowed concluding that digital marketing has a significant influence on the quality of service in the hotel sector in the Tacna region - of Peru, in the year 2021; since a chi-square value = 143.746 and $p = 0.000$ was obtained, complemented by the value of the Nagelkerke coefficient = 0.972; therefore, if the priority is to improve the quality of the service provided in the city's lodging establishments, this should be done by strengthening the digital marketing strategy, which will allow a closer approach to potential tourists interested in visiting the city, and who require more information about the conditions of infrastructure, comfort, service conditions, characteristics of the department, among others.

The results found are in agreement with the work carried out by Hoyos - Estrada and Sastoque - Gómez (2020) who conclude that Colombian SMEs should apply more digital marketing strategies that allow them to generate more income in this scenario of new commercial reality; since it found that digital marketing does influence the perception that hotels provide a quality service.

Similarly, there is an agreement with the work of Striedinger (2018), who concludes that as time goes by, digital marketing is being used more in Colombia, to develop greater commercial opportunities and boost communication and interaction with all people, which contributes to strengthening the image and positioning, and visualize the offers; since the quality of service in hotels is influenced by the improvement in digital marketing strategies.

There is also agreement with the work of López et al. (2018), who conclude that 82% of Ecuadorian SMEs have access, using mainly to communicate their offers through social networks; since the aspect most highlighted by the tourist in the dimension "Flow" is that they consider the image quality of the hotel adequate, which is perceived through the review of social networks.

On the contrary, there is a discrepancy with the work of Aznar et al. (2016), who conclude that there is no relationship between the quality of hotel service from the perception of users and economic and financial results; since it was found that if the digital marketing strategy is improved, which would generate an improvement in the quality of service and thus greater options to increase revenue from hosting tourists.

There is an agreement with the work of Silva and Ramos (2019), who conclude that the frequent use of the digital marketing strategy would contribute significantly to having more students; since it has been similarly concluded that if the digital marketing strategy is improved, it would be possible to provide a better quality of service.

There is also agreement with the work of Rivera (2019), who concludes that the tourist perceives at a high level the quality of service of 4-star hotels in Puno, highlighting the aspects of intangibles, empathy and responsiveness; since 49.5% of tourists who visited Tacna in 2021, consider of adequate level the quality of service that characterize the hotels, being the most outstanding the "Reliability".

There is also agreement with the work of Diaz and Rivas (2019), who conclude that the method of sending emails is not attractive to tourists, who are interested in carrying out a detailed review of the website and social networks; since 87.4% of Peruvian tourists who visited Tacna consider the use of

digital marketing as a strategy that allows tourists to decide to stay and receive more friendly information about the benefits of the service to be at a regular level.

There is an agreement with the work of Mendoza (2019), who concludes that there is a relationship between digital marketing and customer loyalty ($Rho = 0.444$); since by finding that there is an influence of digital marketing on the quality of service, it is understood that there is a relationship between both variables.

Finally, there is an agreement with the work of Ortíz (2019), who concludes that it is necessary to improve the various strategies and tools related to digital marketing and competitiveness, focused on the 4F model; since 87.4% of tourists consider the use of digital marketing by hotels in the city to be regular, which implies that it is necessary to strengthen this strategy.

CONCLUSIONS

Digital marketing has a significant influence on the quality of service in the hotel sector in the Tacna region - Peru, in the year 2021, given the chi-square value = 143.746 ($p = 0.000$), and the Nagelkerke coefficient = 0.972; furthermore, 87.4% of Peruvian tourists consider the use of digital marketing by hotels to be of a regular level, with the most outstanding dimension being "Feedback" and the one focused on improving "Loyalty"; and 49.5% consider the quality of hotel service to be of an adequate level, with the most outstanding dimension being "Reliability" and the one focused on improving "Tangibles".

The digital marketing flow significantly influences the quality of service of the hotel sector in the Tacna - Peru region, given the chi-square value = 84.545 ($p = 0.000$), and the Nagelkerke coefficient = 0.734; being the most highlighted aspect by the tourist the adequate image quality of the hotel and what should be improved is the hotel website to be more striking, interactive and to show more advertising about the infrastructure and amenities of its facilities.

The digital marketing functionality significantly influences the quality of service of the hotel sector in the Tacna - Peru region, given the chi-square value = 86.814 ($p = 0.000$), and the Nagelkerke coefficient = 0.746; being the most highlighted aspect by the tourist that the hotel's web service is very useful and what should be improved is to update the structure of the hotel website and the option to make online purchases.

Digital marketing feedback significantly influences the quality of service in the hotel sector in the Tacna - Peru region, given the chi-square value = 87.319 ($p = 0.000$), and the Nagelkerke coefficient = 0.749; the most highlighted aspect by the tourist is that the hotel design is attractive and what should be improved is the use of strategies that contribute to differentiate the service and the interaction with the hotel representatives.

Digital marketing loyalty has a significant influence on the quality of service in the hotel sector in the Tacna-Peru region; given the chi-square value = 103.027 ($p = 0.000$), and the Nagelkerke coefficient = 0.825; the most important aspect highlighted by the tourist is that the hotel generates trust and what should be improved is to promote the building of relationships with the hotel managers and that there is a frequent dialogue with them.

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