

Assessing Public Service Quality and User Satisfaction: A Case Study of the District Municipality of San Luis, Peru

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The study on the quality of public services and user satisfaction in the district municipality of San Luis, Peru, is important for researchers, politicians and officials. The objective is to know the relationship between variables from the perspective of users, focusing on the expectations of users and the fulfillment of obligations of public servants. A questionnaire of 47 questions was applied to the sample of 382 users, 22 on the quality of public services and 25 on user satisfaction. The instrument was validated by expert judgment and its reliability with Cronbach's Alpha, the hypothesis test was performed with Spearman's Rho and it turned out that the quality of public services is directly and moderately related to user satisfaction (0.415) which includes sanitation, public cleanliness and local health (0.405). education, culture and sports (0.392), citizen security (0.411), development of social programs (0.380), civil registry service (0.442), supply and marketing of products and services (0.324); but it has a direct and weak relationship with transit, circulation and public transport (0.266) and works and infrastructure (0.199) with bilateral significance of 0.000 and a margin of error of 5%.

Keywords: quality; public services; quality of service; satisfaction; satisfaction with the service.

1. Introduction

The article deals with quality of public services and user satisfaction in the district municipality of San Luis Province of Cañete, Peru, is developed within the framework of the law of municipalities, whose development will provide a scope for researchers, politicians, officials and public servants.

Service quality according to Pizzo (2013) is the habit developed and practiced by an organization to interpret the needs and expectations of its customers and offer them, consequently, an accessible, adequate, agile, flexible, appreciable, useful, timely, safe and reliable service, even under unforeseen situations or in face of errors, so customer feels understood, attended and served personally, with dedication and efficiency, and surprised with greater value than expected, providing consequently higher revenues and lower costs for the organization; In view of this, the satisfaction of the needs and expectations of the customer or

citizen, in particular state, through various agencies and in accordance with its current standards, determines quality of services provided by organizations worldwide; However, the management of municipal governments in various nations is inadequate in terms of providing quality services worldwide. In response to this situation, innovation is becoming a stimulus for change in public institutions in Europe and North America in recent years, this has driven the development of governments based on the transformation of local, central and national governments through the use of technology (Eriksson et al., 2017); but we also know innovative management experiences in Chile, Mexico and Argentina drive innovative management in Latin America (Mauro et al., 2019); However, there are shortcomings in most municipalities in Latin America, but innovation will access that gap that still needs to be solved.

On the other hand, user satisfaction is a metric that indicates how happy consumers are with the product and services provided by the university, which includes factors such as agility, accuracy, friendliness, among others related to municipal services.

Consequently, we must make it clear that local governments in Peru are territorial bodies in charge of a certain group of population over which weigh the function of providing public service decentralized government who have obligation to meet the demands of services of the inhabitants as in health, public cleaning and local health, education, culture and sport, public safety, works and infrastructure, development and social programs, transit, traffic and public transportation, civil registration, supply and marketing of products and services, among other services that corresponds to the district municipality, therefore public servants have the obligation and the requirement to provide good service, since their selection or appointment includes performing activities that seeks the common good of the population, in addition to this each public state personnel is the image of the Peruvian state; However, in our country we feel the dissatisfaction of population with public governments, which is why this article shows the results on the quality of public service and user satisfaction.

In this context, the inevitable question arises: What is the relationship between the quality of public services and user satisfaction in the district municipality of San Luis, the quality of public services approached from the perspective of the Servqual Model and user satisfaction from the municipal function that includes sanitation, public cleaning and local health; education, culture and sports; public safety; public works and infrastructure; development and social programs; transit, traffic and public transportation; civil registries and supply and marketing of products and services.

The research is important because it measures quality of public services from the users' point of view, obtaining level of satisfaction of the users and relating them; the results will allow to act with knowledge of cause and understanding that a good service to user or administered not only seeks to respond to requests of the users but also seeks to generate a value that allows to increase the satisfaction of the users and to achieve the growth and development of the organization. From the theoretical point of view, a conceptual framework specialized in field of study linked to public management is presented; in practice, the results of user satisfaction on quality of service are shown; and in methodology, the application of the scientific method with ethical principles is presented.

The theoretical basis of the research is the Servqual model of service quality, which has been

used since 1988 and has undergone numerous improvements and revisions. It is a commercial research method that makes it possible to measure service quality, determine customer expectations and determine how they appreciate the service. This model makes it possible to analyze qualitative and quantitative aspects of customers and to discover unpredictable and uncontrollable factors. Servqual informs us about customer's opinions about the companies' services. It also allows us to collect customer comments and recommendations, which can be used to improve certain aspects or perceptions.

The Servqual model groups five dimensions for measuring service quality (Zeithaml, Bitner and Gremler, 2009), which are as follows:

- Reliability: refers to the ability to execute the promised service reliably and carefully. That is, that the company keeps its promises, on deliveries, service provision, problem solving and pricing.
- Responsiveness: This is the willingness to help users and to provide them with prompt and adequate service. It refers to attentiveness and promptness in dealing with requests, answering customer questions and complaints, and solving problems.
- Assurance: It is the knowledge and attentiveness of employees and their ability to inspire credibility and trust.
- Empathy: Refers to the level of individualized attention offered by companies to their customers. It should be conveyed through personalized service or service tailored to the customer's taste.
- Tangible elements: It is the physical appearance, physical facilities, such as infrastructure, equipment, materials, personnel.

Customer or user satisfaction is an elementary attitude of exchanges between companies and market, and since the beginning of marketing, satisfaction has been considered as the decisive factor of business success (Gil, Sanchez, Berenguer, & Gonzalez-Gallarza, 2005). It is known to all of us that customer satisfaction and consumer capture efficiently drive productivity and increased profit volume (Reichheld, 1996; Heskett, Sasser, & Schlesinger, 1997), while Kotler (2003) observes customer satisfaction is a level of a person's state of mind when comparing their feelings obtained from the service or product with their expectations either of pleasure or dissatisfaction, where if results are lower than their expectations, there is a feeling of dissatisfaction and if the results are up to their expectations, then the customer is satisfied. On the other hand, if results are above their expectations, the client or customer is very satisfied.

When it comes to the factors that have to do with customer satisfaction Zeithaml et al (2009) "in his book, states that customer satisfaction is influenced by the quality of the product or service, also intrinsic factors such as the mood or emotional state of the customer or user and also due to situational factors such as opinion of people around them who are directly related to them", while Oliver (2009) believes satisfaction is a feeling of response to a fulfilled customer or user expectation, variable over time according to the perception of individuals and the behavior of organizations. The importance of customer satisfaction lies in the fact it helps us to know the probability of a good business or service provided, which leads to success in private or public sector, and dissatisfaction is failure.

The dimensions of user satisfaction that determine according to service provided by the municipality are:

- Sanitation, public cleanliness and local health; it is the actions of the municipality composed of a set of services related to the protection and preservation of public health.
- Education, culture and sports; it has to do with the promotion of learning, practice and identification with local, regional, national and international cultural manifestations, as well as the knowledge and practice of sports and recreation in its different modalities.
- Citizen security; is the set of actions aimed at establishing, strengthening and protecting the democratic civil order, eliminating threats of violence in the population and allowing a safe and peaceful coexistence.
- Works and infrastructure; linked to municipal actions regarding infrastructure as a whole that involves facilities, services and technical means that support the development of local activities.
- Development and social programs; is the set of actions implemented by the municipality in order to ensure the welfare of its population aimed at children, the elderly and adults who are preferably in conditions of vulnerability.
- Transit, circulation and public transportation; actions related to the organization of the local transportation system and access to transportation.
- Civil registries: Unit in charge of registering vital events such as births, marriages, deaths, divorces and others.
- Supply and commercialization of products and services; it is a set of actions and municipal order that is carried out to have a better administration of the destination markets, and attended by settlers (wholesale concessionaires) to sell to wholesale distributors merchandise acquired in the markets of origin that guarantee the demand of the population within an optimal framework.

Within the national scope we find , in his research called "quality of service and satisfaction of users of the Municipality of Villa el Salvador - Lima, 2019," he points out that his study is sustained in the dissatisfaction of users originated in the areas of attention of the public body, so purpose of the study is to determine the relationship that exists between the variables "quality of service" and "user satisfaction". The author highlights the interest in his study, in recognizing which dimensions require an improvement in their services to obtain satisfaction in users of the public organism. The research work consisted of a sample of 384 users who come to the municipality (citizens over 18 years of age, citizens under 65 years of age and citizens living in Villa el Salvador district). The development of research is applied by means of the survey (collection technique), with SERVQUAL measurement scale. Obtained information, and processed through the SPSS program determined that there is a highly significant relationship between the variables studied, having the correlation coefficient Rho Spearman ($\rho = 0.697$) being a moderate relationship; and in the results of its dimensions are as follows: in the reliability dimension and the second variable the correlation coefficient of Rho Spearman of 0.601; in empathy dimension and the second variable the Rho Spearman correlation coefficient of 0.510; in the tangible elements dimension and the second variable

the Rho Spearman correlation coefficient of 0.502; in the security dimension and the second variable the Rho correlation coefficient of 0.356, in the responsiveness dimension and the second variable the Rho correlation coefficient of 0.363.

In its research work entitled: "Quality of service and satisfaction of users of the Provincial Municipality of Azángaro - 2021", it focuses on evaluating the quality as well as level of satisfaction perceived by the users of provincial public entity of Azángaro. With the objective of determining relationship between the quality of service and satisfaction of users of the provincial municipality, the research methodology has a quantitative, descriptive correlational approach, proposing a non-experimental/transversal design; the population of the municipality is 310 users, so the sample is 172 users (obtained by simple probabilistic sampling). In order to obtain data, we opted for survey collection technique (applied to users of some service of the provincial municipality); obtaining as results a significant relationship ($p=0.001$) between quality of the service and user satisfaction, with a correlation coefficient $\rho=0.532$ (moderate correlation). And the relationship with its dimensions and the second variable is as follows: reliability, there is a statistically significant relationship ($p=0.001$) and correlation value $\rho=0.443$ (positive relationship - moderate correlation); responsiveness, there is a statistically significant relationship ($p=0.001$) and correlation value $\rho=0.349$ (moderate positive relationship); safety, there is a statistically significant relationship ($p=0.0001$) and correlation coefficient $\rho=0.309$ (positive and moderate relationship).

In her study entitled "Quality of service and its relationship with user satisfaction - Tabacones District, 2019 for the academic degree of Master of Science with mention in Administration and public management, at the National University of Cajamarca, the main objective was to determine the relationship between quality of service and user satisfaction in the District Municipality of Tabaconas, 2019 (the research is a cross-sectional correlational study). The population is made up of 880 users, being its sampling of 260 users (inhabitants over 18 years of age, inhabitants who have carried out some procedure in municipality), the technique for collection of information was through the survey having as a result the following perception by the users on the quality of service: 57.1 % consider as regular the quality of service, 23.5% bad quality of service and 19.4 % good quality of service; and in the satisfaction after being attended considers: 51.5 % regular satisfaction, 24.5 % bad satisfaction and 24% good satisfaction, concluding that there is a significant direct relationship between the variable quality of service and satisfaction of the users of the district municipality of Tabaconas - 2019 ($P \text{ value} < 0.005$), considering that the users of the district municipality of Tabaconas - San Ignacio, perceive the quality of service as regular generating a regular user satisfaction.

In the international field we have Castillo S. (2020), in his scientific article Quality of the municipal service from the citizen's perspective, he maintains that it was developed with the "purpose of the research was to characterize the quality of municipal service from the citizen's perspective, the methodology used was of basic type, non-experimental design, descriptive, with a sample of 157 citizens, the technique applied was survey and the questionnaire as an instrument. The results show the characteristics of the quality of the municipal service, from the citizen's perspective through the SERVQUAL Model, identifying that; 42.2% of the citizens are AED and TED with the tangible elements, on the other hand, regarding reliability 53.1%, responsiveness 45.5%, security 52.7% and empathy 48.1% mention that they are TDA and ADA. The critical management issues that hinder the quality of services are: deficiencies

in service follow-up, user understanding, difficulties in resolving complaints, deficient virtual attention and non-modern facilities. It is recommended to make an innovative proposal in management of the quality of the municipal service, for the solution to this problem".

Živković et al., (2019) in their work scopes of quality in municipal services from the citizen's perspective, points out that the evaluation was performed using the SERVQUAL model according to, mentions to us that, "the quality of municipal service, from the point of view of customers, is not satisfactory, i.e. there are significant gaps between the expectations of customers and their perception of each determinant of service quality, especially reliability and accountability. of service. Also, Emrah et al., (2019) indicate that the largest difference between perception and expectation is found in the reliability factor with 28.92%. The tangible factor has had the lowest percentage of importance with 12.42%."

In their research entitled "The services and satisfaction of the users of the Decentralized Intercultural Participative Autonomous Government of the Canton Suscal", for obtaining a degree in Business Administration at the National University of Chimborazo - Riobamba - Ecuador, the authors aim to determine services and satisfaction of the users of Decentralized Intercultural Participatory Autonomous Government of the Canton Suscal; the authors have as objective to determine the services and incidence in the satisfaction of the users of the autonomous government, relating the dependent variable (Satisfaction of the users) and independent (The Services) for the achievement of the non-experimental investigation, for which it used the mixed methodology (quantitative and qualitative), with a descriptive and explanatory level of investigation, with a survey designed with the Likert scale that used as technique for the collection of data to a sample of 350 users of a population of 3900 users; The result was services affect the satisfaction of users of the Decentralized Intercultural Participative Municipal Autonomous Government of Canton Suscal; deducing that the general perception regarding quality of service offered by the public entity in terms of user satisfaction, modern technological equipment and physical facilities, quality of service, service hours, personalized attention, speed of response in terms of procedures, trained personnel, there is a slight acceptance by users of the GAD.

Therefore, after taking knowledge of the national and international background, this research contributes in relation to the careful structuring of the data collection instrument based on an adequate operationalization of variables, in which the dimensions, indicators and the subsequent formulation of the questions of the questionnaire are carefully identified and then these results collected with the data collection instrument are correlated.

The research was carried out in the district of San Luis in the province of Cañete, department of Lima, Peru, in which to collect the data, the users of the municipality were located in their homes, which includes the different population centers of district, to whom the reason for study was explained, and who were previously sensitized for the application of the instrument and with the respective compliance with the code of ethics for research.

Finally, the research sought to test hypothesis formulated, which consisted of demonstrating whether quality of public services is directly and moderately related to the satisfaction of the users of District Municipality of San Luis - Cañete and its respective dimensions of user satisfaction.

2. Methodology

Methodology in scientific research is of great importance and is defined and assumed by each researcher. Cortés & Iglesias (2004) argue that "Methodology is the science that teaches us to direct a certain process in an efficient and effective way to achieve desired results and aims to give us strategy to follow in process" (p. 8). In this regard, Campos (2010) posits that it is to implement the overarching steps of the scientific method, through the formulation of a structured plan delineating the sequential and organized activities, including the identification of tests to be conducted and the techniques to be employed for data collection and analysis.

In this sense, the research can be classified as applied, as it is also referred to as active or dynamic. It is closely related to basic research, as it is dependent on the discoveries and theoretical contributions made in that field. Applied research is applicable to concrete problems, in concrete circumstances and characteristics, with aim of immediate use rather than the development of theories. Similarly, the research design is non-experimental and of a transversal nature, as stated by Cortés & Iglesias (2004), who define non-experimental research as "the one that does not deliberately manipulate the variables to be studied." This type of research entails observing phenomena in their natural context and subsequently analyzing them. Additionally, Hernandez et al. (2014) provide a complementary perspective, defining cross-sectional designs, also referred to as transactional, as a method of collecting data at a single point in time. This approach is utilized to describe variables and analyze their incidence or interrelation at a specific point in time.

The general method employed was scientific method, as defined by Bernal (2012) as "the set of proposals, guidelines, and methods of study and solution of research problems." Furthermore, it encompasses the set of procedures employed to examine and resolve a problem or set of research problems, utilizing requisite instruments and techniques. In this context, the deductive method was utilized, as it is characterized by the assertion that the conclusions derived through deduction are valid as long as the premises from which they are derived are also true. Additionally, the inductive method was employed, as it progresses from individual to the general, functioning as a systematic process that seeks potential general relationships that can be substantiated by specific results. Specifically, it is the reasoning that, starting from particular cases, rises to knowledge as well. This reasoning goes from knowledge of a certain degree of generalization to a new knowledge with a higher degree of generalization than the previous one. The analytical method consists in the extraction of the parts of a whole, with the aim of studying and examining them separately. This allows for the observation of relationships between them. e. It is a research method that involves breaking down the whole into its parts with the sole purpose of observing the nature and effects of the phenomenon in question. This method can better explain and understand the phenomenon under study, in addition to establishing new theories. The synthetic method, whose main objective is to achieve a synthesis of the investigated, has a progressive character. The objective is to develop a theory that unifies the various elements of the phenomenon under study. Conversely, the synthetic method represents a reasoning process that reconstructs a whole, building upon the foundations established by the analytical method.

It is evident that this approach facilitates a comprehensive understanding of the analyzed phenomenon and the comparative method. The comparative method involves a systematic

comparison of the main elements (constants, variables, and relationships) of the reality under study with those of other similar realities that have been previously investigated.

The study population comprises 13,436 users of District Municipality of San Luis - Cañete, as reported by INEI sources (2022). The study sample is composed of 382 users, calculated using the following formula:

$$n = \frac{N * Z_{\alpha}^2 * P * Q}{\epsilon^2 * (N - 1) + Z_{\alpha}^2 * P * Q} = \frac{13436 * (1,96)^2(0,5) * (0,5)}{(0,05)^2 * (13436 - 1) + (1,96)^2 * (0,5) * (0,5)} = 382$$

Where:

- N= Total population
- Z_{α} =1.96 squared (if 95% certainty)
- P = Expected proportion (in this case % = 0.5)
- Q = 1-p (in this case 1-0.5 = 0.5)
- ϵ = Margin of error (5%=0.05).

The research employs a survey as its primary data collection technique. López & Fachelli (2015) define this technique as "a form of data collection through the investigation of subjects whose objective is to obtain systematic concepts of research problem." (p. 8) The data collection instrument utilized in research was the questionnaire. García (2004) defines the questionnaire as "a system of rational questions, ordered in a coherent way, both from logical and psychological point of view, expressed in a simple and understandable language" (p. 29). The validity and reliability of the questionnaire were determined by expert judgment, who recommended its application, and Cronbach's Alpha yielded a value of 0.86 and 0.92, respectively.

Data collection instrument.

SURVEY TO MEASURE THE QUALITY OF PUBLIC SERVICES

Objective: The survey is conducted for academic purposes and seeks to measure the satisfaction of the users of the District Municipality of San Luis with respect to the quality of public services after having gone through a procedure.

Instructions: Mark with a cross in the box that best fits your answer considering that a Likert scale from 1 to 7 is used, where 1 represents the lowest score, i.e., when the citizen is totally dissatisfied, and 7 represents the highest score, i.e., when the citizen is totally satisfied.

Strongly Disagree	Disagree	Partially Disagree	Neither Disagree/Not Agree	Partially Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

N°	Questionnaire	Scale						
		1	2	3	4	5	6	7
	Dimension: Reliability of service delivery							
1	The time you were told that your service request would be attended to has been met (is being met).							
2	The employees are trained to help the user to solve or resolve any problem during the time the service is being provided.							
3	You consider that the employees perform (are performing) the job well during the attention to your service request.							
4	You consider that the employees provide you with their services at the time they promise to do so.							
5	You have noticed that the employees perform their work in an orderly manner and without making mistakes.							
	Dimension: Responsiveness (responsiveness)							
6	When you started your procedure or service request, you were told the approximate time in which you would be fully attended.							
7	The time you waited before being attended to was the most appropriate.							
8	The employees always show a predisposition to attend to citizens' requests.							
9	There is always an employee with time available to attend to citizens' requests.							
	Dimension: Safety							
10	The behavior and appearance of employees inspires confidence and security.							
11	Employees act in a safe and confident manner in relation to the activities and tasks they perform.							
12	The facilities and conditions of the environment or environments where you were served give a sense of security.							
13	Employees project a high degree or level of training for the tasks and activities of their job.							
	Dimension: Empathy of the system							
14	The municipality serves at appropriate and pertinent times in relation to the population.							
15	The municipality has employees who give personal attention to each citizen.							
16	The employees show (showed) interest in attending to you in a very special way, they were interested in your case.							
17	Did you notice that the employees fully understand your specific needs or what you require.							
18	You have noticed that the employees really care that your request is attended and/or solved.							
	Dimension: Tangible elements in the provision of service							
19	The employee who attended you has sufficient and modern-looking computer							

	equipment (laptop, computer, printer...).						
20	The environment or office where you were attended has adequate furniture, projects good condition and is attractive.						
21	You consider that the employee who attended you is adequately dressed and looks hygienic.						
22	You have found printed material (brochures and similar) freely available that have helped you in the procedure or service required.						

SURVEY TO MEASURE USER SATISFACTION WITH RESPECT TO PUBLIC SERVICES

Objective: The survey is conducted for academic purposes and seeks to measure your satisfaction with the public services offered by the District Municipality of San Luis.

Instructions: Mark with a cross in the box that best suits your answer considering that the Likert scale of 1 to 7 is used, where 1 represents the lowest score, that is, when the citizen is totally dissatisfied, and 7 represents the highest score, that is, when the citizen is totally satisfied.

Strongly Disagree	Disagree	Partially Disagree	Neither Disagree/Not Agree	Partially Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

N °	Questionnaire	Scale						
		1	2	3	4	5	6	7
	SANITATION, PUBLIC CLEANLINESS AND LOCAL HEALTH							
1	You are satisfied with the public cleaning service provided by the municipality.							
2	You perceive that the municipality regulates and controls cleanliness, hygiene and sanitation in commercial and industrial establishments, homes, schools, swimming pools and other public places.							
3	The municipality adequately installs and maintains toilets and bathrooms for public use.							
	EDUCATION, CULTURE AND SPORTS							
4	The municipality contributes to the education of the population.							
5	The municipality promotes the preservation of culture.							
6	The municipality promotes the development of sports through championships or others.							
	PUBLIC SAFETY							
7	The municipality promotes an adequate security service.							
8	The Municipality coordinates with the Civil Defense Committees of its district, and attends to the problems of citizens affected by natural disasters or others.							
9	The Municipality guarantees citizen security in the face of the actions of people with							

	bad habits, or other threats against life and health.								
	WORKS AND INFRASTRUCTURE								
10	The Municipality executes urban or rural infrastructure works that are indispensable for the economic development of the population, such as markets, irrigation canals and others.								
11	The Municipality executes urban infrastructure works for the recreation and leisure of the population, such as construction of tracks or sidewalks, roads, parks, gardens and others.								
12	The population is fully satisfied with the infrastructure works carried out by the municipality in its jurisdiction.								
	DEVELOPMENT AND SOCIAL PROGRAMS								
13	The municipality promotes neighborhood participation in social, sports and economic events.								
14	The municipality develops social assistance programs for the population.								
15	The Municipality contributes to the Glass of Milk and Pension 65 programs.								
16	The Municipality manages social programs for the benefit of the population of the district of San Luis.								
	TRAFFIC, CIRCULATION AND PUBLIC TRANSPORTATION								
17	The municipality adequately regulates the circulation of public transportation.								
18	The Municipality maintains pedestrian and vehicular traffic signs.								
19	The Municipality supervises the proper pedestrian and vehicular circulation.								
	CIVIL REGISTRIES								
20	The municipality provides adequate staff and adequate hours for civil registries.								
21	The municipality's civil registry office maintains up-to-date information.								
22	The civil registry office delivers birth, marriage, and other certificates efficiently.								
	SUPPLY AND MARKETING OF PRODUCTS AND SERVICES								
23	The municipality contributes to the adequate supply of basic necessities for the population.								
24	The municipality supervises the adequate commercialization of basic necessities.								
25	The Municipality supervises the adequate provision of health, education, recreation and other services.								

3. Results

Results corresponding to variable Quality of public services

Table 1 shows the results of the data consolidation corresponding to the variable quality of public services in which users express that 2.4% totally disagree, 4.2% disagree, 8.6% partially disagree, 50% are indifferent expressing that they neither disagree nor agree, 21.5% say they partially agree, 9.9% agree and 3.1% totally agree.

Table 1: of frequency of the variable quality of public services.

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	9	2,4	2,4	2,4
	Disagree	16	4,2	4,2	6,5
	Partially Disagree	33	8,6	8,6	15,2
	Neither Disagree/Not Agree	192	50,3	50,3	65,4
	Partially agree	82	21,5	21,5	86,9
	Agree	38	9,9	9,9	96,9
	Strongly agree	12	3,1	3,1	100,0
	Total	382	100,0	100,0	

Results corresponding to the Users' Satisfaction variable

Table 2 shows the results of the data consolidation corresponding to the users' satisfaction variable, in which 8.1% of users express that they totally disagree, 23.8% that they disagree, 28.0% that they partially disagree, 25.1% are indifferent, expressing that they neither disagree nor agree, 10.2% say that they partially agree, 3.9% agree and 0.8% totally agree.

Table 2: frequency of the variable users' satisfaction with public services.

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	31	8,1	8,1	8,1
	Disagree	91	23,8	23,8	31,9
	Partially Disagree	107	28,0	28,0	59,9
	Neither Disagree/Not Agree	96	25,1	25,1	85,1
	Partially agree	39	10,2	10,2	95,3
	Agree	15	3,9	3,9	99,2
	Strongly agree	3	,8	,8	100,0
	Total	382	100,0	100,0	

Hypothesis testing

The hypotheses were tested with Spearman's Rho, taking into account the scale proposed by Abraira and Pérez de Vargas (1996), who maintains that the correlation coefficient ranges between -1 and +1, the value 0 indicating that there is no linear association between the two variables under study; therefore, if $r = 0$, the correlation is null:

If $r = 0$ the correlation is null.

If $0 < r \leq 0.25$ the correlation is weak.

If $0.25 < r \leq 0.50$ the correlation is moderate.

If $0.50 < r \leq 0.75$ the correlation is strong.

If $0.75 < r < 1$ The correlation is very strong.

If $r = \pm 1$ the correlation is perfect.

The interpretation considerations, in summary, by way of conclusion to perform the Spearman's rank correlation interpretation test it was taken into account that the interpretation of Spearman's rho coefficient agrees at values close to 1; they indicate a strong and positive correlation. Values close to -1 indicate a strong and negative correlation. Values close to zero

indicate no linear correlation. Other types of correlation may exist, but not linear.

Positive or negative signs only indicate the direction of the relationship; a negative sign indicates that one variable increases as the other decreases or vice versa, and a positive sign indicates that one variable increases as the other increases and if one decreases so does the other.

Testing the general hypothesis

a) Research hypothesis: The quality of public services is directly and moderately related to the satisfaction of the users of the District Municipality of San Luis - Cañete.

b) Formulation of the null hypothesis (H0) and alternative hypothesis (H1)

H0: The quality of public services is not directly and moderately related to the satisfaction of the users of the District Municipality of San Luis - Cañete.

H1: The quality of public services is directly and moderately related to the satisfaction of the users of the District Municipality of San Luis - Cañete.

c) Choice of test statistic: Spearman's Rho.

d) Significance level: $\alpha = 0.05 = 5\%$.

e) Calculation of the test statistic.

Table 3: Correlations (Testing the general hypothesis).

		Quality of public services		User satisfaction
Spearman's Rho	Quality of public services	Correlation coefficient	1,000	,415**
		Sig. (bilateral)	.	,000
		N	382	382
	User satisfaction	Correlation coefficient	,415**	1,000
		Sig. (bilateral)	,000	.
		N	382	382

** . Correlation is significant at the 0.01 level (bilateral).

f) Decision-making: The quality of public services is directly and moderately related to the satisfaction of the users of the District Municipality of San Luis - Cañete due to the fact that Spearman's Rho = 0.415 with bilateral significance level of 0.000 which is less than that established for the test which was 5% established.

4. Discussion

At the national level, in his research, entitled "Quality of Service and User Satisfaction in the Municipality of Villa El Salvador, Lima, 2019," he identifies a highly significant relationship between variables under investigation, with the Rho Spearman correlation coefficient ($\rho = 0$). In the study entitled "Quality of Service and User Satisfaction of the Provincial Municipality of Azángaro - 2021," the researcher found that there was a significant relationship ($p=0.001$) between the quality of service and user satisfaction, with a correlation coefficient $\rho=0$. This finding indicates that there is a strong correlation between the two variables. The results indicated a moderate correlation ($r = 0.532$) and demonstrated a significant direct relationship

between the quality of service and user satisfaction in district municipality of Tabaconas in 2019 ($P < 0.005$). The findings suggest that users of district municipality of Tabaconas in San Ignacio perceive the quality of service as average, resulting in average user satisfaction.

At international level Castillo S. (2020), in his scientific article Municipal service quality from citizen's perspective says results show the characteristics of municipal service quality, from citizen's perspective through the SERVQUAL Model, identifying that; 42.2% of citizens are AED and TED with the tangible elements, on the other hand, regarding reliability 53.1%, responsiveness 45.5%, security 52.7% and empathy 48.1%; Živković et al., (2019) in their work scopes of quality in municipal services from the citizen's perspective, points out that "the quality of municipal service, from the customers' point of view, is not satisfactory, i.e. there are significant gaps between customers' expectations and their perception of each determinant of service quality, especially reliability and service responsibility. Also, Emrah et al., (2019) indicate that the largest difference between perception and expectation is found in the reliability factor with 28.92%. The tangible factor has had the lowest percentage of importance with 12.42%"; and , in their research entitled "Services and the satisfaction of the Users of Decentralized Intercultural Participative Decentralized Autonomous Government of Canton Suscal", says that services affect the satisfaction of the users of the Decentralized Intercultural Participative Municipal Decentralized Autonomous Government of Canton Suscal; It can be deduced that the general perception regarding the quality of service offered by the public entity in terms of user satisfaction, modern technological equipment and physical facilities, quality of service, service hours, personalized attention, speed of response in terms of procedures, trained personnel, there is a slight acceptance by the users of the GAD.

5. Conclusions

After concluding research with their respective statistical analysis, we conclude by stating the following:

1. The quality of public services is directly and moderately related to the satisfaction of users of the District Municipality of San Luis - Cañete due to the fact that Spearman's $Rho = 0.415$ with a bilateral significance level of 0.000, which is less than that established for the test, which was 5%.
2. The quality of public services is directly and moderately related to the satisfaction with respect to sanitation, public cleanliness and local health of the users of the District Municipality of San Luis - Cañete due to the fact that Spearman's $Rho = 0.405$ with a bilateral significance level of 0.000, which is less than that established for the test, which was established at 5%.
3. The quality of public services is directly and moderately related to the satisfaction with respect to education, culture and sports of the users of the District Municipality of San Luis - Cañete because the Spearman's $Rho = 0.392$ with a bilateral significance level of 0.000, which is less than that established for the test, which was 5% established.
4. The quality of public services is directly and moderately related to the satisfaction with respect to citizen security of the users of the District Municipality of San Luis - Cañete due to the fact that Spearman's $Rho = 0.411$ with a bilateral significance level of 0.000, which is less

than that established for the test, which was established at the 5% level.

5. The quality of public services is not directly and moderately related to the satisfaction with respect to the works and infrastructure of the users of the District Municipality of San Luis - Cañete due to the fact that Spearman's $Rho = 0.199$ therefore The quality of public services has a direct and weak relationship with the satisfaction with respect to the works and infrastructure of the users of the District Municipality of San Luis - Cañete with a level of bilateral significance of 0.000 which is less than that established for the test which was 5% established.

6. The quality of public services is directly and moderately related to satisfaction with respect to the development of social programs of the users of the District Municipality of San Luis - Cañete due to the fact that Spearman's $Rho = 0.380$ with a bilateral significance level of 0.000, which is less than that established for the 5% test.

7. The quality of public services is directly and moderately related to the satisfaction with respect to transit, circulation and public transportation of the users of the District Municipality of San Luis - Cañete, due to the fact that Spearman's $Rho = 0.266$ with a bilateral significance level of 0.000, which is less than that established for the test that was 5%.

8. The quality of public services is directly and moderately related to the satisfaction with respect to civil registries of the users of the District Municipality of San Luis - Cañete, since the Spearman's $Rho = 0.442$ with a bilateral significance level of 0.000, which is less than that established for the test, which was 5% established.

9. The quality of public services is directly and moderately related to satisfaction with respect to the supply and commercialization of products and services of the users of the District Municipality of San Luis - Cañete, since Spearman's $Rho = 0.324$ with a bilateral significance level of 0.000, which is less than that established for the test, which was 5%.

References

1. Abad García, F. (1997). Investigación evaluativa en Documentación. Valencia: L'autora. Recuperado el 10 de 09 de 2023, de https://www.google.com.pe/books/edition/Investigaci%C3%B3n_evaluativa_en_Documentaci/GlgXwKRXIWYC?hl=es-419&gbpv=1&dq=que+es+satisfacci%C3%B3n+de+usuarios&pg=PA176&printsec=frontcover
2. Abaira. V, Pérez de Vargas A. (1996) Métodos Multivariantes en Bioestadística. ED. Centro de Estudios Ramón Areces. España. Disponible en: < http://www.hrc.es/bioest/Reglin_1.html
3. Álvarez (2006). Introducción a la calidad: Aproximación a los sistemas de gestión y herramientas de calidad. Primera edición. Ideas propias Editorial. España. p.p. 5.
4. Bon (2008). Gestión de Servicios de TI basada en ITIL V3. Primera edición. Editorial del Gobierno Británico. Reino Unido. p.p. 21
5. Castillo S. Cárdenas M. y Palomino A. (2020), Calidad del servicio municipal desde la perspectiva del ciudadano, Ciencia Latina Revista Científica Multidisciplinar, Ciudad de México, México. ISSN 2707-2207 / ISSN 2707-2215 (en línea), julio-diciembre, 2020, Volumen 4, Número 2. https://doi.org/10.37811/cl_rcm.v4i2.130 p. 898

6. Coasaca Roque, E. M. (2023). Repositorio UNAJ. Recuperado el 8 de 10 de 2023, de <http://repositorio.unaj.edu.pe/handle/UNAJ/269>
7. Cortés Cortés, M., & Iglesias León, M. (2004). Generalidades sobre Metodología de Investigación. México: Universidad Autónoma del Carmen.
8. Emrah, K., Yildirim, A., & Ozcan, S. (2019). Integrated Usage of the SERVQUAL and Quality Function Deployment Techniques in the Assessment of Public Service Quality: The Case of Ardahan Municipality. *Business and Economics Research Journal*, 10(4), 885–901.
9. Eriksson, M., Persson Osowski, C., Malefors, C., Björkman, J., & Eriksson, E. (2017). Quantification of food waste in public catering services – A case study from a Swedish municipality. *Waste Management*, 61, 415–422. <https://doi.org/10.1016/j.wasman.2017.01.035>
10. García, F. (2004). El cuestionario. recomendaciones metodológicas para el diseño de cuestionario. Córdova, México: Limusa.
11. Kleyman, S. (2009) La importancia del servicio al cliente. Recuperado el 22 de setiembre de 2022, de la fuente: <http://www.cnnexpansion.com/opinion/2009/07/15/la-importancia-del-servicio-al-cliente>.
12. La Torre Santos, G. (07 de 03 de 2022). Universidad Nacional de Cajamarca. Recuperado el 8 de 10 de 2023, de <https://repositorio.unc.edu.pe/handle/20.500.14074/4764>
13. Ley N° 27972 (2003) Ley orgánica de Municipalidades, https://www.mef.gob.pe/contenidos/presu_publ/capacita/programacion_formulacion_presu_puestal2012/Anexos/ley27972.pdf
14. López, J. (1998). Procesos de investigación. Caracas, Venezuela: Panapo.
15. López, P., & Fachelli, S. (2015). Metodología de la investigación social cuantitativa. https://ddd.uab.cat/pub/capli/2016/163567/metinvsocua_a2016_cap2-3.pdf
16. Mamani Avendaño, D. G. (15 de 08 de 2019). Repositorios de tesis - Universidad Peruana Unión. Recuperado el 8 de 10 de 2023, de <https://repositorio.upeu.edu.pe/handle/20.500.12840/2032>
17. Mauro, S. G., Cinquini, L., & Pianezzi, D. (2019). New Public Management between reality and illusion: Analysing the validity of performance-based budgeting. *British Accounting Review*, 100825. <https://doi.org/10.1016/j.bar.2019.02.007>
18. Mohammadi, A., & Mohammadi, J. (2012). Evaluating quality of health services in health centres of Zanjan district of Iran. *Indian Journal of Public Health*, 56(4), 308. <http://doi.org/10.4103/0019-557X.106422>
19. Nyeck, S.; Morales, M.; Ladhari, R.; Pons, F. “10 years of service quality measurement: reviewing the use of the SERVQUAL instrument”. *Cuadernos de Difusión*, 7 (13), 101 - 107. 2002.
20. Pérez Fdez. de Velasco, J. A. (1994). Gestión de la Calidad Empresarial. Madrid: ESIC Editorial. Recuperado el 15 de 09 de 2023, de https://www.google.com.pe/books/edition/Gesti%C3%B3n_de_la_calidad_empresarial/2ibhVMNE_EgC?hl=es&gbpv=1&dq=DEFINICI%C3%93N+DE+CALIDAD+DE+SERVICIO&pg=PA94&printsec=frontcover
21. Pérez, V. (2007). Calidad Total en la Atención al Cliente: Pautas para Garantizar la Excelencia en el Servicio. Primera edición. Ideas propias Editorial. España. p.p. 6, 8-16.
22. Pizzo, M. (2013). Construyendo una definición de Calidad en el Servicio. Recuperado el 22 de setiembre de 2022, de la fuente: <http://comoservirconexcelencia.com/blog/construyendo-una-definicion-de-calidad-en-el-servicio/.html>
23. Rocca, L. (2016), en su trabajo “Satisfacción del usuario en el ámbito del Sector Público. Un estudio sobre el Departamento de Obras Particulares de la Municipalidad de Berisso”
24. Rodríguez Moguel, E. A. (2005). Metodología de la investigación (Universidad de Juárez Autónoma de Tabasco ed.). México, México. Recuperado el 9 de 10 de 2023, de

https://www.google.com.pe/books/edition/Metodolog%C3%ADa_de_la_Investigaci%C3%B3n/r4yrEW9Jhe0C?hl=es-419&gbpv=1&dq=definicion+de+tipos+de+investigaci%C3%B3n&pg=PA25&printsec=frontcover

25. Saltos Aguilar, W. M., & Quindi Castillo, S. O. (3 de 07 de 2023). Repositorio Digital UNACH. Recuperado el 08 de 10 de 2023, de <http://dspace.unach.edu.ec/handle/51000/11225>
26. Thompson, I. (2009) Definición de cliente. Recuperado el 22 de setiembre de 2022, de la fuente: <http://www.promonegocios.net/clientes/cliente-definicion.html>.
27. Živković, N., Glogovac, M., & Kovačević, B. (2019). Determining the quality of municipal services using SERVQUAL model. Proceedings of the 5th IPMA SENET Project Management Conference (SENET 2019). <https://doi.org/10.2991/senet19.2019.4>