Guidelines to improve the quality of service in self-service hardware stores

Lineamientos para mejorar la calidad del servicio en ferreterías de autoservicio

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1. Introduction

Although there are many definitions of quality of service in the literature, some authors emphasize that it is not possible to find an adequate definition that describes the quality of the service. The reason for this fact can be found in the specificity, the multi-attribute character of the service, but also the different understanding of the quality of the service within the organization and that perceived by the client (Gulc, 2017). For example, quality has been defined as aptitude for use, or the extent to which a product or service successfully serves the purposes of consumers (Kahn et al., 2002). However, service quality has also been defined as an attitude, which means that the perceived quality of the service is a global judgment or attitude, related to the superiority of a service (Clemes et al., 2008), for this reason, the importance of quality of service for consumers and therefore for suppliers is
unquestionable, because consumers are committed to seek quality in their purchases and their lives (Dabholkar, 2015).

Customer service is one of the organizational processes that companies perform taking into account the growing competition, to attract business opportunities, increase profitability, better access to the market, increase customer satisfaction and the level of loyalty (Calif, 1987). For this reason the organizations carry out research to know the quality of the service they offer, for example, in Bansal and Taylor (2015) a study was carried out to find the variables that play an important role in the quality of service and customer satisfaction. Likewise, Dabholkar (2015) examined the impact of customer participation in service provision on quality perceptions and proposes that for certain services, a greater participation of clients will generally lead to a higher quality of service perceived. Similarly, in Zahari et al. (2010), the factors that contribute and those that restrict the quality of services for the public are identified.

Therefore, organizations understand that the quality of services is based not only on the knowledge and skills of the advisors, but also how the organization as a whole, is concerned with improving it. For this reason, it is necessary to know the perception of both internal and external customers. Likewise, with the quality of services, the quality of the product or service increases, a competitive advantage is obtained, profitable opportunities are obtained and, as a result, sales and revenues increase (Goffin and Price, 1996). On the other hand, self-service stores are a type of establishment where customers can choose and take personally from the shelves the products they wish to acquire. Based on the concept of self-service, establishments have left aside the importance of the quality of service in the sales area; because it is the customer who makes the purchase process on its own. Tigani (2006) explains that in these types of stores, only four out of 100 dissatisfied customers complain. The other 96 leave and start looking for a new source to obtain the product or service.

For this reason, self-service hardware stores hire personnel for the position of sales consultants so that they are responsible for guiding, providing technical advice, transmit basic knowledge about the products and address the customer effectively in order to achieve that this feel satisfied for the service provided. In Zulia state, there is a market made up of self-service hardware stores that have been affected by the inadequate quality of customer service, losing their position within the market, decreasing customer loyalty and increasing their percentage of dissatisfied customers. Consequently, this research has been designed as a purpose, to be an instrument that, when put into practice, allows us to improve customer service in the aforementioned hardware stores.

2. Methodology
The research is of a descriptive nature, which, according to what was proposed by Bordens and Abbott (2018), is limited to the description of social or educational phenomena in a particular temporary and special circumstance. Regarding the design that was used, it corresponds to non-experimental research, because the research was carried out without manipulating the variable (Kumar, 2003). Also, according to the moment in which the data were collected, the design of the study corresponds to the cross-sectional, descriptive, which, according to Babbie (2011), has the purpose of measuring the variable and providing its description. Finally, according to Babbie (2011), is classified as of field because the research was carried out in the same place where the events occur, in this case, within the physical facilities of the self-service hardware stores located in Maracaibo Municipality.

2.1. Population and sample
The study population consisted of the sales consultants (internal customer) and the external customers of the self-service hardware stores located in Maracaibo Municipality. It is important to clarify that the real numbers were not handled due to the confidentiality required by each of these companies with respect to this information (Table 1).

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population and sample</td>
</tr>
</tbody>
</table>


To select the sample of the population, it was calculated with Formula 1 for sampling in finite universes (Chávez, 2007).

\[
 n = \frac{4 \cdot p \cdot q \cdot N}{E^2(N - 1) + 4 \cdot p \cdot q}
\]

(1)

Wherein:

- \( n \): Sample size
- \( p \) y \( q \): probabilities of success and failure
- \( E^2 \): 5% error
- \( N \): Population size

For purposes of calculating the sample, the population consists of a total of 251 sales consultants, and 3526 external customers, when replacing the data in the formula resulted in sales consultants 155 subjects and for external customers 359.

### 2.2. Research instruments

The technique used for the data collection process of the present investigation was observation by survey. Two research instruments were developed, which correspond to two questionnaires on the Likert frequency scale, which consists of the proposition that is made to a subject of a set of items in front of which he / she is asked to request that you express your reaction to the proposed stimulus. Under this criterion, a structured questionnaire was developed in 25 items addressed to the internal client and a questionnaire of 25 items addressed to the external client, corresponding to the quality of service variable. The instruments have five response alternatives taking into account the Likert scale and with the weights assigned according to the perception as the case may be: totally agree (5), agree (4), neither agree nor disagree (3), disagree (2) and totally disagree (1).

### 2.3. Validity and reliability of research instruments

To carry out the validation, the judgment of seven (7) experts was taken into account in terms of content and methodology in which the work is framed, who were in charge of declaring the instrument valid. For the purposes of the present investigation, a pilot test was conducted on a population of 10 internal customers and 10 external customers of the self-service hardware stores, in this case San Francisco Municipality, which are not part of the final sample, to whom the instrument and with the results obtained, the Cronbach coefficient was calculated to determine the reliability. According to the provisions of Cho and Kim (2014), the Cronbach's Alpha coefficient can be calculated through the application of Formula 2.
Wherein:

\[ r_{tt} = \frac{K}{K-1} \left(1 - \frac{\sum S_i^2}{S_t^2}\right) \]  

Where:

- K: Number of items that the instrument has
- rtt: Reliability coefficient
- Si2: Variance of the scores of each item
- St2: Variance of totals

Similarly, to calculate the reliability of each item, we can use the SPSS program to calculate the Cronbach's Alpha, which is based on the measurement of the subject's responses, in which values between zero (0) and one are taken. (1), where zero (0) represents zero reliability and one (1), total reliability. The result obtained for the Cronbach's Alpha coefficient in the questionnaire used in the pilot test was 0.94, which indicates a very high instrument reliability according to the interpretation scale.

### 2.4. Data analysis

In the data analysis is determined from the quantitative point of view, the statistical tests to be used according to the type of research that is carried out. To interpret the results obtained after the application of these methods, a scale was used, which can be seen in Table 2.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Indicator</th>
<th>Interval</th>
<th>Category</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Totally agree</td>
<td>4.21 a 5.00</td>
<td>Very satisfactory</td>
<td>Satisfactory trend</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
<td>3.41 a 4.20</td>
<td>Satisfactory</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>2.61 a 3.40</td>
<td>Neutral</td>
<td>Neutral trend</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
<td>1.81 a 2.60</td>
<td>Unsatisfactory</td>
<td>Unsatisfactory trend</td>
</tr>
<tr>
<td>1</td>
<td>Totally disagree</td>
<td>1.00 a 1.80</td>
<td>Very unsatisfactory</td>
<td></td>
</tr>
</tbody>
</table>

### 3. Results

Table 3 shows the results obtained from the statistical analysis of the dimensions and sub-dimensions corresponding to the quality of service variable, where a value can be observed for the arithmetic mean of the data obtained from 3.40, which locates the variable at a neutral level.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dimensions</th>
<th>Avg.</th>
<th>Sub-dimension</th>
<th>Avg.</th>
<th>Indicators</th>
<th>Avg.</th>
</tr>
</thead>
</table>

Table 2: Scale for the interpretation of the quality of service variable

Table 3: Variable: Quality of service
<table>
<thead>
<tr>
<th>Qualification of the variable</th>
<th>3.40</th>
</tr>
</thead>
</table>

### Interpretation of the Scale
Neutral

The results obtained from the informants surveyed indicate that there is a neutral level regarding the quality of service, the same evaluated from two perceptions, the perception of the internal client (sales consultant) and that of the external client (buyer). Once the results for each perception are obtained, they are compared to obtain the general result of the variable, which indicates the current situation of the self-service hardware stores with respect to their quality of service.

The quality of the service is an abstract and difficult concept to reach. It is a judgment that the consumer makes about the superiority that results from the comparison made between the expectations that are held about the service they will receive and the perceptions of the service received (Sumaedi and Yarmen, 2015). This definition coincides with what has been done in the development of the quality of service variable in research. However, in Clemes et al. (2008), the quality of the service was defined as an attitude. Which means that the perceived quality of the service is a global judgment or attitude, related to the superiority of the service. This definition contradicts the results obtained in the study, because the incidence is neutral and customers are not satisfied or dissatisfied with the quality of the service offered and, according to the theoretical aspect, the quality of service must meet or

### Quality of service

<table>
<thead>
<tr>
<th>Elements of the perception of the quality of service of internal clients</th>
<th>3.82</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tangible elements</strong></td>
<td>3.26</td>
</tr>
<tr>
<td><strong>Intangible elements</strong></td>
<td>4.37</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elements of the perception of the quality of service of external clients</th>
<th>2.97</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tangible elements</strong></td>
<td>3.77</td>
</tr>
<tr>
<td><strong>Intangible elements</strong></td>
<td>2.17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Qualification of the variable</th>
<th>3.40</th>
</tr>
</thead>
</table>

### Interpretation of the Scale
Neutral
To detail the results, the quality of service variable is made up of two dimensions, which are: elements of the perception of the quality of service of internal customers and elements of perception of the quality of service received by external customers. These, in turn, are divided into two subdimensions proposed by Gronroos (1982), which are: the tangible elements (technical aspects of service provision) and intangible elements (the expressive performance of the service) as two critical dimensions of quality of service.

3.1. Dimension: Elements of the perception of the quality of service of internal clients

The results of the statistical analysis of the subdimensions and indicators corresponding to the dimension elements of the perception of the quality of service for the internal clients, are reflected in Table 4. The value for the average was 3.82, which indicates that the perception they have about the service they offer is in the category of satisfactory.

Seto (2004), indicates that when customers evaluate the quality of a service, they do not take into account a single factor or criteria but several. In addition, it indicates that Parasuraman, Zeithaml and Berry (1988) in the investigations they carried out identified five determining elements of the quality of service independently of the service considered. These are tangible elements, reliability, responsiveness, security and empathy. For the subdimension tangible elements, an average of 3.26 was obtained, placing it in the neutral category, which can be seen in Table 5.

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Indicator</th>
<th>Avg.</th>
<th>Interpretation according to the average scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image of the facilities</td>
<td>4.02</td>
<td>Satisfactory</td>
<td></td>
</tr>
<tr>
<td>Teams</td>
<td>3.4</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Internal client</td>
<td>3.25</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Communication material</td>
<td>2.38</td>
<td>Unsatisfactory</td>
<td></td>
</tr>
</tbody>
</table>
In the tangible elements, the image of the facilities is evaluated, which in this case obtained an average of 4.02 placing it in the satisfactory category; the equipment indicator that turned out to have an average of 3.4 and an internal client with 3.25, both being in the neutral category and finally the material communication indicator with an average of 2.38, which places it in a satisfactory category. When analyzing the indicator image of the facilities, it was observed that the internal clients have a satisfactory perception of the facilities of the organization. They agree that the appearance of the facilities and the equipment of the organization allow it to offer an adequate service and that its image during its working day is adequate. Regarding this, Johnson and Zinkhan (2015) explain that the image of a company refers to what the company is physically and is represented by its facilities, equipment, personnel, etc. It also plays an important role in influencing how the public responds to promotional information about an organization.

In terms of the equipment and internal customer indicators, both showed an average placing them in the neutral category, which indicates that the internal customers do not completely agree that the equipment and tools of the hardware stores are adequate to offer adequate attention to the client. There is a neutral tendency in the responses when referring to the attention given by the organization to the internal client, in the satisfaction they feel for the treatment they provide in the hardware store, which shows that the attitude of the internal clients during the provision of the service it reflects the treatment that the organization offers. Internal customer satisfaction must be part of the company’s culture, based on the conviction that any staff dissatisfaction quickly impacts the attention that the company provides its customers. This definition is contradicted by the results due to the evidence found regarding the neutral trend, related to the treatment provided by the organization to its employees.

With regard to the material communication indicator, the results indicated that internal clients are dissatisfied in this regard. The information brochures do not allow the purchase process to be effective, the bulletins do not fulfill their main objective, which is to inform and the book of suggestions does not facilitate the interaction between the internal and external clients. The material of business communication, are the different information brochures, email messages, business card, advertising catalog, reports, internal notes, etc., that allow the communication process to be effective (Chen, Davidson and Ou, 2016). This definition does not agree with the results obtained because the material of the communication in the organizations evaluated, does not achieve that the communicative process between the organization and internal client and internal and external client, be effective.

The other sub-dimension corresponding to the dimension elements of the perception of the quality of service of internal clients corresponds to the intangible elements. The results corresponding to the evaluation of this sub-dimension are shown in Table 6, where it is observed that the average for this sub-dimension was 4.37, placing it in the category of very satisfactory.

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Indicator</th>
<th>Avg.</th>
<th>Interpretation according to the average scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intangible elements</td>
<td>Reliability</td>
<td>4.19</td>
<td>Satisfactory</td>
</tr>
<tr>
<td></td>
<td>Answer’s capacity</td>
<td>4.41</td>
<td>Very Satisfactory</td>
</tr>
<tr>
<td></td>
<td>Security</td>
<td>4.39</td>
<td>Very Satisfactory</td>
</tr>
</tbody>
</table>
Intangible elements, as well as tangible elements, are special characteristics taken into consideration by clients to judge their quality and are represented by reliability, responsiveness, security and empathy (Zeithaml et al., 2003). Those exposed by these authors are related to the results obtained in the investigation, because the evaluation shows that they are very satisfactory and this is the duty to be according to the theory. In this case, these elements of this sub-dimension have been evaluated by the internal clients and their perception has been satisfactory. The perception of internal customers about these indicators allows us to infer that they provide the customer with the service in an appropriate manner, that is to say that sales consultants inspire confidence in the customer during the service, their attitude when offering solutions to customers is ideal. , the answers to requests are fast, they are trained to offer a reliable service, they are friendly with the client and the communication during the purchase process is adequate.

3.2. Dimension: elements of the perception of the quality of service received by external customers

In this second dimension of the variable “quality of service”, the tangible and intangible elements are evaluated again, but now from the perception of the external client. The results for this evaluation are shown in Table 7 and it is noteworthy that the mean for this dimension was 2.97, which places it in a neutral category.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Sub-dimension</th>
<th>Avg.</th>
<th>Interpretation according to the average scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elements of the perception of the quality of service received by external customers</td>
<td>Tangibles elements</td>
<td>3.77</td>
<td>Satisfactory</td>
</tr>
<tr>
<td></td>
<td>Intangibles elements</td>
<td>2.17</td>
<td>Neutral</td>
</tr>
<tr>
<td>Qualification of the variable</td>
<td></td>
<td>2.97</td>
<td></td>
</tr>
<tr>
<td>Interpretation of the Scale</td>
<td></td>
<td></td>
<td>Neutral</td>
</tr>
</tbody>
</table>

The results show that consumers or external customers have a neutral trend perception, which indicates that they are not sufficiently convinced of the quality of the service offered in the hardware stores. Likewise, the results of the sub-dimension tangible elements according to the perception of the external customer, are expressed in Table 8 and it can be highlighted that it has an average of 3.77, which places it in the satisfactory category. The indicators to be evaluated for this sub-dimension are the image of the facilities, equipment, internal customer and communication material.

| Sub-dimension: Tangible elements |

Table 8
The image indicators of the facilities, equipment and internal customer, are within the satisfactory trend with averages of 4.65, 4.43 and 3.63 respectively. According to these results, it can be inferred that external customers agree that the appearance of the facilities and hardware of the hardware stores allow them to perceive an adequate service. In addition, they agree that the image of sales consultants or internal clients is appropriate, that the devices and tools present in the organization are adequate for the process and that the treatment provided by the organization to the sales consultant is ideal. Regarding the material communication indicator, the average was 2.35, placing it in a category of unsatisfactory, which indicates that the external client perceives that the brochures and bulletins of the hardware stores do not allow the purchase process to be effective and, the book of suggestions does not facilitate the interaction between sales consultant and client.

Table 9 shows the results of the intangible elements, where it is indicated that the average of these elements was 2.17, being in the unsatisfactory category. According to the perception of external clients, the reliability, response capacity, security and empathy indicators were evaluated.

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Indicator</th>
<th>Avg.</th>
<th>Interpretation according to the average scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles elements</td>
<td>Image of the facilities</td>
<td>4.65</td>
<td>Very Satisfactory</td>
</tr>
<tr>
<td></td>
<td>Teams</td>
<td>4.43</td>
<td>Very Satisfactory</td>
</tr>
<tr>
<td></td>
<td>Internal client</td>
<td>3.63</td>
<td>Satisfactory</td>
</tr>
<tr>
<td></td>
<td>Communication material</td>
<td>2.35</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>Qualification of the variable</td>
<td></td>
<td>3.77</td>
<td></td>
</tr>
<tr>
<td>Interpretation of the Scale</td>
<td></td>
<td></td>
<td>Satisfactory</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Indicator</th>
<th>Avg.</th>
<th>Interpretation according to the average scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intangibles elements</td>
<td>Reliability</td>
<td>2.34</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td></td>
<td>Answer's capacity</td>
<td>1.83</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td></td>
<td>Security</td>
<td>2.65</td>
<td>Neutral</td>
</tr>
<tr>
<td></td>
<td>Empathy</td>
<td>1.86</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>Qualification of the variable</td>
<td></td>
<td>3.77</td>
<td></td>
</tr>
<tr>
<td>Interpretation of the Scale</td>
<td></td>
<td></td>
<td>Unsatisfactory</td>
</tr>
</tbody>
</table>

For the reliability indicator, the average resulting from the statistical work was 2.34, placing it in the unsatisfactory category. This indicates that, according to the perception of the
external customer, the organizations do not provide the services correctly and the sales consultants do not inspire confidence during the service. The results obtained for this indicator contradict what was stated by Zeithaml et al. (2003), who explain that reliability refers to the knowledge and courtesy of service providers, as well as their ability to inspire confidence and responsibility in clients; it is the probability of good functioning.

With reference to the answer's capacity indicator, the average is 1.83 which indicates that it is unsatisfactory. The perception of the external client is that the attitude shown by the sales consultant is not adequate, the responses to requests are not quick and these responses do not generate confidence or satisfy their needs. The answer's capacity is considered a fundamental element in the operation of the service and leads to customer satisfaction (Amyx and Bhuian, 2009); also, the response capacity of a service advisor serves as critical behaviors that impact satisfaction (Ahearne et al., 2007). In summary, responsiveness is a key factor that determines customer satisfaction, and the results indicate that there is not adequate response capacity and therefore have dissatisfied customers.

The security indicator gave as a result of the mean 2.65, presenting a neutral trend. This indicates that the clients have a neutral perception about the ability and capacity of the sales consultants to provide service and the reputation of the self-service hardware stores of the Maracaibo Municipality before their clients. Finally, the empathy indicator is in the unsatisfactory category with an average of 1.86. With reference to this, Zeithaml et al., (2003), indicate that empathy refers to the client expecting individual and humanitarian (affectionate) attention from the service provider; is the mental and affective identification of a subject with the mood of another, and this postulate contradicts the results obtained, since the external client perceives that the sales consultant does not give him an affectionate attention and communication between the client and the advisor is not adequate.

3.3. Guidelines

The following guidelines are aimed at promoting self-service hardware stores, the quality of service offered by sales consultants. These guidelines arise in response to the main problems identified in the analysis of the results of this research work, where weaknesses were detected in the actions of the internal clients of the organizations that were evaluated, which must be improved for greater efficiency of the service offered. Guidelines will be established for those results that according to the scales, are in the neutral, inadequate or very inadequate categories. Table 10 shows the indicators whose results were the ones mentioned above.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Sub-dimension</th>
<th>Indicator</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elements of the perception of the quality of service of internal clients</td>
<td>Tangibles elements</td>
<td>Communication material</td>
<td>Very inadequate</td>
</tr>
<tr>
<td>Elements of the perception of the quality of service received by external customers</td>
<td>Intangibles elements</td>
<td>Reliability</td>
<td>Very inadequate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Answer's capacity</td>
<td>Very inadequate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Security</td>
<td>Inadequate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Empathy</td>
<td>Very inadequate</td>
</tr>
</tbody>
</table>
In Table 10, the dimension, sub-dimension and the indicator to be taken into account for the realization of the guidelines in the investigation are indicated.

### 3.3.1. Guidelines for the improvement of the use of the tangible element of communication material

It is the responsibility of the managers of the organizations, the implementation of this guideline. Making use of the book of suggestions, this book should be placed in a strategic site of the hardware store in such a way that all customers have access to it. In addition, managers must hold periodic meetings where the complaints and suggestions contained in the book are read, and in this way know the client's perception with respect to the service provided and with respect to the organization, in order to establish strategies that allow implement the suggestions that are convenient and minimize the dissatisfaction of customers.

The hardware stores under study also have information brochures on the products they sell and on the organization, so it is very important that these brochures are accessible to the customer from the moment of entry to the hardware store, to serve as a guide during your visit to the establishment. Regarding the newsletters, both those that contain information for sales consultants and for clients, should be disclosed in informative billboards and in strategic sites of the hardware stores such as the cashier area for the bulletins addressed to the clients and the dining area for the bulletins of the internal customers. The box area is proposed, because it is the site where the client is most likely to have a stationary time during the process and can be informed through the reading of the bulletins. In the same way, the dining room is also a strategic place, since it is the place where the internal client rests and has leisure time. These bulletins must be relevant and updated.

As for promotions, if you do not include the information in the brochure of the hardware store, it is necessary to make talkers who detail the information. The managers must carry out this guideline and evaluate any other type of communicative material that allows to guide the client during his stay at the hardware store and from another perspective, that this material keeps the personnel of the hardware store informed, about any change in the organization or information relevant to it. The work plan presented between objective, activities, period and responsible personnel is defined in Table 11.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Establish strategies to improve the use of the tangible element of communication material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
<td>Elements of the perception of the quality of service received by internal-external customers</td>
</tr>
<tr>
<td>Indicator</td>
<td>Vommunication material</td>
</tr>
<tr>
<td>Activity</td>
<td>Use of suggestion books</td>
</tr>
<tr>
<td></td>
<td>Periodic meetings</td>
</tr>
<tr>
<td></td>
<td>Provide information brochures</td>
</tr>
<tr>
<td></td>
<td>Disclose newsletters</td>
</tr>
<tr>
<td>Period</td>
<td>Establish planning with the management staff and prepare the work schedule</td>
</tr>
<tr>
<td>Responsible</td>
<td>Managers-Sales Advisors</td>
</tr>
</tbody>
</table>

### 3.3.2. Guidelines for the improvement of the use of the intangible element of the perception of the quality service

The perception that internal clients and external clients have about intangible elements is a
fundamental aspect of the study. For this reason, strategies must be implemented that allow the quality of service to be effective, to ensure that the sales consultants offer a reliable service, with the capacity to respond quickly and efficiently, security in the responses of the requests generated, and to be empathetic with the client. For this, it is considered convenient to hire trained personnel and service quality experts, who through workshops can disseminate their knowledge to employees of hardware stores, in order to improve the quality of service offered.

These personnel must have knowledge about the Servqual model and its implementation, so that they can transmit their knowledge and develop this model in the hardware stores. The purpose of this model is to improve the quality of service offered by organizations and assess the quality of service through the dimensions reliability, responsiveness, security, empathy and tangible elements. The Servqual model measures what the client expects from the organization that provides the service through the five dimensions mentioned, contrasting that measurement with the perception of the client once the service is rendered. When determining the discrepancy between what the clients expects from the service and what it perceives, it facilitates the implementation of appropriate corrective actions that improve quality. The proposed work plan is found in Table 12.

Tabla 12
Guidelines for the improvement of the use of the intangible element of the perception of the quality service

<table>
<thead>
<tr>
<th>Objective</th>
<th>Establish strategies to improve the use of the intangible element of the perception of the quality service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
<td>Elements of the perception of the quality of service received by external customers</td>
</tr>
<tr>
<td>Indicator</td>
<td>Reliability</td>
</tr>
<tr>
<td>Activity</td>
<td>Experiential workshops</td>
</tr>
<tr>
<td>Period</td>
<td>Establish planning with the management staff and prepare the work schedule</td>
</tr>
<tr>
<td>Responsible</td>
<td>External personnel hired-Managers-Directive</td>
</tr>
</tbody>
</table>

4. Conclusions
Based on the results of the investigation, we proceed to the following:

According to the perception of the internal customer, the elements of the perception of the quality of service offered by the internal customers of the self-service hardware stores of the Maracaibo Municipality, and the tangible elements, are adequate to offer an excellent service, however, the element "communication material" is inclined towards a negative trend due to the fact that the existing materials are not used correctly and new communication materials are not implemented; the intangible elements conformed by reliability, responsiveness, security and empathy, stand out as they are considered adequate in the process.

Likewise, by identifying the elements of the perception of the quality of service received by external customers in the self-service hardware stores of the Maracaibo Municipality, the tangible elements are adequate for the provision of the service, with the exception of communication material that is deficient and incorrect its usability. Regarding the intangible elements, customers do not believe that the service offered is reliable, the response capacity of the sales consultants is not quick or satisfies the client's needs, the sales advisors do not
offer an adequate or safe service and in their the vast majority are not empathetic to their clients.

When comparing the results obtained between the elements of the perception of the quality of service offered by the internal client and received by the external customer of the self-service hardware stores of the Maracaibo Municipality, it is evident that the internal clients think that the service provided by them is adequate, but, when comparing with the results of the perception of the external clients, it can be verified that the clients are not completely satisfied by the service rendered, especially in the regarding the indicators reliability, responsiveness, security and empathy, which indicates that there is a deficiency in the quality of service in the hardware stores. Regarding the material indicator of communication, both internal customers and external customers agree that the use of this material in organizations is inadequate. Regarding the indicators reliability, responsiveness, security and empathy; the internal clients perceive an adequate service while the external clients think the opposite.

The formulation of practical guidelines to improve the quality of service of the self-service hardware stores of the Maracaibo Municipality, two guidelines were formulated aimed at the development of strategies for the improvement of tangible material elements of communication and improvement of the intangible elements of the perception of the quality of service. These guidelines were based on the indicators that showed deficiency in the evaluation carried out.

**Bibliographic references**


