

# Quality Performance Index of the Hotel Sector in the Municipality of Guajará-Mirim, Rondônia: Use of the Varimax method as an analytic model

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**Keywords—** Index, Hotel sector, Varimax

**Abstract—** Objective: To build the quality performance index of the hotel sector in the city of Guajará-Mirim, on the border with Bolivia, based on the Varimax method. Method: The Varimax method was used as an analytical research model. The IDQSH questionnaire used is structured with 4 parameters and 15 variables. The questionnaire was applied after signing the Informed Consent Term - FICF. Data were collected from the guests of ten hotels that were randomly selected. The Sector Quality Performance Index - IDQSH was calculated following the Factor Analysis techniques. Result: the result found allows pointing out the classification among the hosting means. The hotels where the quality performance was considered “Good” are, in descending order of the IDQSH: A (0.542), F

*method, Guajará-Mirim.*

(0.529) and D (0.514). In the quality standard considered "Bad" are the hotels, also in descending order of the IDQSH: H (0.483), B (0.467), E (0.452), C (0.433), G (0.393) and J (0.369). Hotel I, with an index of 0.276, achieved the classification that indicates a "Terrible" quality performance. Final Considerations: The Quality Performance Index in Hotel Services (IDQSH) of the municipality of Guajará-Mirim obtained an index of 0.445, considered "Bad", according to the adopted classification.

## I. INTRODUCTION

Tourism is one of the fastest growing tertiary sector activities in the world, according to data from the report prepared by the World Economic Forum. In Brazil, these estimates are no different. The development of tourist activity in Brazil, which is linked to the natural beauties and cultural diversities spread over its 8, 514, 876 km<sup>2</sup>, leaves nothing to be desired for the great and important world destinations, such as the beaches in Central America, for example. The Brazilian Tourism Company - EMBRATUR has revealed that this activity contributes with more than 3% of national income from the export of goods and services, as well as being responsible for the creation of more than 7% of direct and indirect jobs in the Brazilian economy [1]. Given this, it is clear that the countless possibilities of tourist practices in Brazil, ranging from business tourism practiced in large cities, to ecotourism, a tourist modality popularized by Lascurain in "Ecotourism: the potential and the pitfalls, as the activity used observation and practices with nature [2]. This tourism modality committed to the environment tends to develop mainly in regions that have an ecological diversity that is still preserved, such as the States of the North region that integrate the immense Amazon forest in Brazilian lands. With this, the development of ecotourism in lands such as the state of Rondônia, more specifically the city of Guajará-Mirim, which has a rich natural, historical and cultural potential, and has an average flow of 360 visitors / tourists per day and, approximately 131,400 per year, which means more than triple the population of the municipality, must necessarily be based on a tourist infrastructure and quality services as an attraction factor. A service without quality and performance below expectations can mean the death of a business in tourism, as the authors warn Cobra [3]; Cobra [4] and Cobra [5].

Tourism is an important vector of endogenous development in Guajará-Mirim. According to Barreto [6], the distribution of tourist resources produces direct and indirect impacts on about 53 items of the economy of a location, as well as impacts on the dynamics of significant productive sectors in different places. Thus, in addition to presenting significant data in the economic field, tourism

influences important socio-cultural aspects of a location, as it constitutes a complex combination of interrelationships between service production, whose composition is integrated into a social practice with cultural base with historical heritage, a diverse environment, natural cartography, hospitality social relations, exchange of intercultural information. The sum of this sociocultural dynamic generates the phenomenon, filled with objectivity, consumed by millions of people, as a synthesis of the tourist product [7]; [8]. Therefore, the factors of tourist attractiveness in a given territory are constituted by natural or artificial (human) elements, which materialize as tourist destinations. Thus, Yázigü [9]; [10]; [11] clarifies that for a place to be considered touristic, it must have three basic characteristics: Have a relative tourist frequency; Provide support services and equipment as a tourist infrastructure (hotels, restaurants, tourism agency, among others) and have a tourist image projection for visitation.

However, it is necessary that local actors feel part of the structuring process of tourism in a given location, as, if this aspect is not met, the chances of success are drastically reduced. According to Melián-González; García-Falcón [12], competitiveness reveals that to increase this factor, tourist attractions, whether natural or artificial, and the action of local actors are necessary. For Loiola [13], the development of a location would result from the capacity of its actors to structure and mobilize, based on their potential and cultural matrix. In this sense, Cunha; Cunha [14] states that the integration of society, the environment and the economy of a locality would enable sociocultural diversities and productive differences, which would be used as potential for transformations and regional development. Thus, according to Nicolas [15], the tourist activity would have the capacity to create, transform and even value different spaces that might not have value in the context of the production logic. This context is reflected in the local reality of the state of Rondônia, which experiences the polarization of development in the Eastern Mesoregion of Rondoniense, leaving the Madeira-Mamoré Mesoregion, more specifically the city of Guajará-Mirim, the role of "faithful depository" of immense reserves, which

compromises its development in other areas of traditional economic activity [16]; [17].

Thus, Cavalcante [17] cites ecotourism as an alternative capable of boosting the local economy, since the city of Guajará-Mirim presents a combination of favorable elements, such as natural, historical, cultural and social factors, in addition to a strategic position in the region, in addition to the relationship with some South American countries. The development of ecotourism in the city of Guajará-Mirim is a vector of integrated and sustainable development in the region of Guajará-Mirim, in Rondônia, aiming at a healthy and balanced development process capable of boosting the local / regional economy, as well as capable of valuing local identity through respect for the environment, folklore manifestations and regional culture [16].

Knowing the IDQSH of the hotel sector in Guajará-Mirim/RO, allows the public power and the private sector, specifically the sectors directly linked to the hotel activity, a better understanding of the importance of quality as an essential factor of competitiveness in the tourist market, which, in the specific case of this study, it forms the foundation for a desirable process of local development. Therefore, this work aims to supply the scarcity of information about the subject in the referred region, which, in general, is known as one of the most important in the state of Rondônia in the tourism segment. In light of this scenario, the general objective of this study is to build the quality performance index of the hotel sector in the city of Guajará-Mirim, on the border with Bolivia, based on the theory of endogenous development, using the Varimax method as a model of analytical research.

## II. METHOD

### 2.1 Type of Study

The research was structured based on aspects of interdisciplinary research given the complexity involved in the topic. This is a hypothetical-deductive study. For the study from a qualitative point of view, interviews were carried out with guests in the different types of accommodation surveyed, following a standard model of a pre-elaborated questionnaire.

### 2.2 Analytical Research Model

The VARIMAX method is a process where the reference axes of the factors are rotated around the source until some other position is reached. The objective is to redistribute the variance of the first factors to others and to achieve a simpler and more theoretically significant factorial [18], [19], [20], [21], [22], [23], [24] and [25]. The choice of

factors was carried out through the technique of latent root. So, the array of factorials loads, which measures the correlation between the common factors and observable variables, is determined by means of the correlation matrix, as Dillon and Goldstein [21].

In order to determine the Hotel Services Quality Performance Index - (IDQSH) the factorial score matrix estimated by the orthogonal-based factorial rotation process was used, as pointed out by Santana [23]. The factor score places each observation in the common factors gap. For each factor  $F_j$ , the  $i$ -th factor score extracted factorial score is defined by  $F_{ij}$ , expressed as follows [21]:

$$(2)$$

Then:

$b_i$  = are the estimated regression coefficients for the  $n$  Common factorials scores;

$x_{ij}$  = Are the  $n$  Observations of  $p$  Observable variables.

$$i = 1,2,\dots,N.$$

$$j = 1,2,\dots,p.$$

To reach the equation that is the perception index [21]; [22], show the sequence evolution of the formulas from the previous equation. It turns out that even if the variable  $F_{ij}$  is not observable it can be estimated through the factorial analysis techniques, using the matrix of observations of the vector  $x$  of observable variables. In factorial notation, equation 2 becomes:

$$(3)$$

In Equation 3,  $F$  is the matrix of the estimated regression from the  $n$  Factorials scores and it can be affected by both the magnitude and the measurement units of the variables  $x$ . To work around this kind of problem, replace the variable  $x$  by the standard variable  $w$ , given the ratio of the deviation around the average and the standard deviation of  $x$ , as follows:

$$\frac{x_i - \bar{x}}{S_x}$$

With these values, Equation 3 is modified making equation 4 possible, then:

$$(4)$$

Based on equation 4, the beta weights matrix ( $\beta$ ) with  $q$  standardized regression coefficients, replaces  $b$ , given that the variables are standardized on both sides of the equation. Pre-multiplying both sides of equation 4 by the value  $w'$ , in which  $n$  Is the number of observations and  $W$

is the transposed matrix of  $w'$ , it makes it possible to reach the following equation:

$$\frac{1}{n} w'_{(p,n)} F_{(n,q)} = \frac{1}{n} w'_{(p,n)} w_{(n,p)} \beta_{(p,q)} = R \tag{5}$$

The Matrix  $w'w$ , therefore is the matrix of intercorrelated variables or correlation matrix among the observations of the matrix  $x$ , designated by R. The Matrix It represents the correlation between the factorials scores and the factors themselves, denoted by  $\Lambda$ . With this, rewriting the equation 5, one must:

$$(6)$$

If the matrix R is non-singular, one can pre-multiply both sides of equation 6 by the inverse of R, obtaining:

$$(7)$$

Substituting the  $\beta$  vector into equation 4, we obtain the factorial score associated with each observation, as follows:

$$(8)$$

The main formula of the perception index is reached where the IP is defined as a linear combination of these factorials scores and the proportion of the variance explained by each factor in relation to the common variance. The mathematical expression is represented by the following formula:

$$(9)$$

Then:

$$i = 1, 2, \dots, n.$$

$\lambda$  = is the variance explained by each factor;

$\sum \lambda$  = is the total sum of the variance explained by the set of common factors.

The factorial score was standardized (FP) to obtain positive values from the original scores and allow the hierarchies of the cities as the values of the performance index are located between zero and one. The formula that allows this tiering can be seen by the following equation:

$$FP_i = \left( \frac{F_i - F_{min}}{F_{max} - F_{min}} \right)$$

It can be seen that And are the maximum and minimum values observed for the factorial scores associated with the parameters observed. It is based on this understanding that it was possible to calculate the Hotel Services Quality Performance Index - (IDQSH) adopted in this study.

2.3 Scale Levels

The classification used by the research to express the results achieved by the IDQSH is described in table 1.

Table 1: Analysis scale adopted by the research.

IDQSH	Classification
> 0,900	great
0,701 - 0,900	very good
0,501 - 0,700	good
0,301 - 0,500	bad
0,000 - 0,300	terrible

Source: adapted from Hair et al[18].

2.4 Parameters and Variables

The IDQSH questionnaire used is structured with 4 parameters and 15 variables. Physical Structure, Service, Services and Daily Value are the Parameters. Accommodations of the lodging medium; Physical Space of Housing Units; Decoration of Housing Units; Comfort of Bed and Furniture; Ventilation and Absence of Noise from Housing Units; Garage location and layout; Ease of making reservations; Hospitality and care in attendance; Accuracy and Agility; Availability to Listen to the Guest; Ability to solve problems; Quality and Speed in Cleaning Services; Domain of other languages; Variety in the Menu of Meals and Benefits compatible with the Price charged, are the Variables.

2.5 Characterization of the research site

The city of Guajar-mirim, according to the Municipal Tourism Secretariat, had 23 lodging facilities, including 9 inns, 13 hotels and one Resort, to meet the accommodation needs of its visitors. The choice of the ten researched means of accommodation was made due to the scarcity of time and resources available to carry out the process. Thus, the choice of means of accommodation was made based on random criteria. Ten hotels were randomly selected, identified as follows: Hotel "A" Pakkas Palafitas; Hotel "B" Maylla Park hotel; Hotel "C" Jamaica Hotel; Hotel "D" Las Gardenias; Hotel "E" Lima Palace Hotel; Hotel "F" Fortaleza Palace Hotel; Hotel "G" Hotel Campos; Hotel "H" Guajar Pousada; Hotel "I" Hotel Gacha and Hotel "J" Hotel Mini Estrela.

2.6 Data Analysis

The statistical tool SPSS (Statistical Package for Social sciences) was used, which enabled the application of mathematical knowledge and allowed the construction of the IDQSH based on the results of the questionnaire.

2.7 Ethical Aspects

The questionnaire was applied after signing the Informed Consent Form – TCLE.



### III. ANALYSIS AND DISCUSSION OF RESULTS

#### 3.1 GUEST PROFILE CHARACTERIZATION

The research made it possible to trace the profile of guests in the means of accommodation in the city of Guajará-Mirim, a Brazilian city that borders Bolivia. The following variables were considered: Gender, Age, Education, Income level, Place of birth, Current residence, Frequency of visits to the city and Length of stay in the city.

Male guests prevail. In some hotels the prevalence of male guests reaches 90%. The hotels that predominate female guests can be explained by the location close to the municipal bus station and the ease of transport between the hotel and the crossing point for Bolivia. This fact can be explained by the location of the aforementioned hotel in relation to the municipal bus station and, also, the price charged by the establishment. Thus, it can be inferred that they are mostly street vendors coming, in general, from Porto Velho, through the formal bus line, which aims to shop in Bolivia, and then resell in the informal market in Porto Velho, capital. of the State of Rondônia.

In relation to age, which most lodging establishments presented, in general, an almost uniform distribution. However, when adopting the same analysis performed previously for responses with 50% or more, it was found that in 20% of the accommodations guests are in the range of up to 30 years (Hotel A and G), 30% in the range of 31 to 45 years (E, H and J) and another 20% in the age group from 46 to 60 years (D and I). There was no significant record for respondents over 60 years of age.

Regarding the level of education, it is observed in Graph 3 that in 40% of the means and accommodations, the guests interviewed declared having only elementary education level, in 41% of them reported having secondary education and only in 19% of these establishments the guests declared to be of superior level. Only hotel "A" 80% of guests have a university degree. Fifty percent or more of guests with elementary education were identified in accommodation facilities B, C, D, H, I and J. Hotels E, F and G had the highest percentages for secondary education.

As for the income level of the interviewees, it can be observed that 20% of the guests declared having an income of 1 to 3 minimum wages, 40% reported receiving 3 to 8 minimum wages and 30% declared receiving more than 8 minimum wages. The highest percentages with incomes from 1 to 3 salaries were in hotels H and J, while hotels A, D, G and J had the highest percentages of 3 to 8 minimum salaries and hotels B, C and F had more than 8 minimum wages.

The origin of the guests presented relatively uniform percentages in the North, South, Midwest and Northeast regions. Considering only the responses above 50% among the respondents of the surveyed means of accommodation, the hotels that presented the highest percentages with a native of Rondônia were B, D, G, H and I.

The results show that in 90% of the means of accommodation, respondents said they reside in Rondônia and only 10% declared that they currently reside in other states in other regions of Brazil. Only the Pakaas Novos hotel is the only one to attract a number of guests from other states more significantly, with 70% of guests from other regions of Brazil. This aspect is explained by the characteristics of the lodging facilities included in the Hotel Resort category, such as the pakaas hotel, where nature is the main product of attractiveness. When considering only responses above 50% among respondents, it was observed that the means of accommodation with the highest percentages residing in the State of Rondônia were, in descending order: B, C, I, D, F, G, H, J and E.

The results show that 80% of guests are visiting the city more than once. Guests visiting the city more than once constantly stay at hotels J, C, D, E, G, H, F and I.

Sixty percent of guests visit the city 1-2 times a year and 30% 3-5 times a year. Hotels D, E, F, C, H and J were the most that received guests 1 to 2 times a year

The length of stay of guests in the city helps to better understand the dynamics of the tourism sector in Guajará-Mirim. This information can be useful in the hotel planning process, as it indicates, together with feedback to hotels about the quality of their services in the city, and be translated as an indicator of attractiveness that can influence the decisions of guests. Eighty percent of guests stay in town for 2-3 days. The hotels that stayed the most between 2 and 3 days were hotels D, H, C, E, B, F, G and J.

#### 3.2 FACTORS DETERMINING THE CHOICE OF ACCOMMODATION

##### 3.2.1 Physical Appearance of Facilities

The physical appearance of the facilities are generally responsible for the first impressions that a guest may have about the establishment in which they will be staying, hence the importance of knowing how much it can influence the choice of a client/user. Fifty percent of surveyed guests say that the physical appearance of a hotel's facilities is not important when choosing. The hotels in which guests answered that their physical appearance was not very important in their choice were in descending order: I, G, J, A and E.

### 3.2.2 Hospitality

It is known that the act of “welcoming”, as an attitude of being hospitable, influences the choice of clients/users of the means of accommodation. Forty percent of the surveyed guests said that the hospitality of a hotel is relatively important when choosing and only 10% said it is important or very important when choosing the means of accommodation. This criterion was one of the most discredited by guests. It was verified that guests who registered responses in the “relatively important” (RI) category were in hotels A, B, F and G. Guests at hotels J and H stated that this criterion is “important” (I) and “very important” (MI), respectively.

### 3.2.3 Quality of hosting services

Ninety percent of guests are concerned about the quality of hotel services. Sixty percent answered that it is important (I) the services offered by the hotels. However, this service is not offered to guests. Most hotels have deficiencies in the services offered to guests.

### 3.2.4 Daily Value of Hosting

This parameter refers to the amount paid by guests for the daily rate, which also influences the choice of a means of accommodation. Based on Graph 13, it is possible to observe that 30% of the means of accommodation surveyed (A, D and H) based on the responding guests, declared that the daily rate is "important" and 20% of them (B and G) declared be this parameter “very important” (MI).

## 3.3 SUMMARY OF THE QUALITY PERFORMANCE INDEX OF THE HOTEL SECTOR

Based on the calculation of the IDQSH of the ten means of accommodation surveyed, it was found that in the general average, the result pointed to an index of 0.445. Given the scale adopted by the research, it can be noted, therefore, that, in general, the performance of the quality of hotel services in the city of Guajar -Mirim presented a level of quality considered Bad.

Hotel A had the best performance with an index of 0.542. Hotels F and D had rates of 0.529 and 0.514, respectively. Therefore, due to the scale adopted, these hotels are at a level of Good performance.

The vast majority of hotels have indexes between 0.301 to 0.500 considered as a Bad index. These indexes were found in hotels H, B, E, C, G and J. Hotel I was the one with the worst result, reaching an index of 0.276, considered a Terrible index by the adopted scale.

The result found allows us to point out the ranking among the searched means of hosting. For hotels where the quality performance was considered “Good”, they are, in

descending order of the IDQSH: A (0.542), F (0.529), and D (0.514). In the quality classification scale considered “Bad” are the hotels, in descending order of the IDQSH: H (0.483), B (0.467), E (0.452), C (0.433), G (0.393) and J (0.369). Hotel I, with an index of 0.276, reached the classification that indicated a “Terrible” quality performance.

Table 2: IDQSH of hotels in Guajar -Mirim.

Hotel	IDQSH	Classification
A	0,542	good
F	0,529	good
D	0,514	good
H	0,483	bad
B	0,467	bad
E	0,452	bad
C	0,433	bad
G	0,393	bad
J	0,369	bad
I	0,276	terrible
Average	0,446	bad

Source: Search result

Based on the result presented, it can be seen that the quality of services offered by hotels in Guajar -Mirim may be influencing the decision of tourists, which leads to underutilization of the city's hotel capacity. With this, it helps to explain why some tourists prefer to stay in the city of Guayar -Mirin in Bolivia and other tourists do not stay in hotels in Guajar -Mirim, returning immediately after their tours or business in the city.

## 3.4 SUMMARY OF GUESTS' OPINION ON THE POSSIBILITY OF THEIR RETURN AND LOCAL TOURISM

### 3.4.1 Guest Return to the Accommodation Means

Although the IDQSH has presented a result considered Bad for most hotels, the respondent guests affirmed, almost hegemonically, that they would return to stay in those means of accommodation. Despite the poor conditions of some hotels, this result would at first indicate a positive feedback. What may seem like satisfaction may also indicate the lack of alternative hotels with better quality in the city.

The hotels that respondents said they would stay again, even with their deficiencies, were hotels A, B, C, D, E, F and G (100%), and hotels H, I and J (90%). There is a prevalence regarding the return to the hosted hotel. This context seems to be paradoxical. Despite the poor

conditions, guests would return to stay at the same hotel.

#### 3.4.2 Tourism as a development vector in the opinion of guests

Hotels A, B, C, D, F, G, H and J were unanimous in recognizing that tourism is a vector of development for the city of Guajar-Mirim. For hotels E and I, this rate was 90%.

Beni [26] raises the importance of service quality, comparing hotel enterprises with other industrial and commercial establishments as follows: While in the industry it is possible to plan the right amount of equipment, facilities and personnel for a certain type of production, the same does not occur with the hotel industry, which waits for the client to put its operational plan into action. The hotel product is static. The consumer must go to him. Industrial or commercial companies, on the other hand, make the product reach the customer. The costs of the hotel operating scheme are fixed. The hotel company, when compared to other types of companies, is less prone to automation, as personal treatment, human warmth, is an essential part of providing hotel services [26].

There are several internal and external factors that influence the process of purchasing a hotel good or service [27]; [28]; [29]; [30]; [31]. The basic factors that influence guests when choosing a hotel for business tourism, for example, are: location, comfort, apartment maintenance, daily rates, belonging to a business center service network, food and beverage services, fitness center facilities and loyalty programs [32]. In this sense, the housing units (UHs) smelling musty, the lack of courtesy and professionalism of the employees, the shower with low water pressure, a breakfast with little variety, an uncomfortable work area in the apartment, the delays Excessive check-outs and poor maintenance in the apartment are some of the factors that tend to go against the quality of hotel services. In general, the Accommodation Means are Housing Units - UHs that are actually the space, reachable from the main areas of common circulation of the establishment intended for use by the guest, for their well-being, hygiene and rest. And they are classified into: I – bedroom – HU consisting of, at least, a bedroom for the exclusive use of the guest, with an appropriate place to store clothes and personal effects. II - apartment - HU consists of the previous item, a bedroom plus private bathroom and: III - suite - HU consists of apartment II, plus living room.

Organizations permanently seek to "manage images" with some appeal for their audience to position themselves positively in the market [33]; [34]. With this, it is understood that the physical structure and the decorative

ambience of a hotel's accommodations are responsible for forming the first impressions and expectations, which pay attention to the cumulative satisfaction of the user's esteem and self-fulfillment needs. Scenarios or environments are influential elements in the public's perception of service encounters, as tangible attributes often pointed out by consumers as having the greatest influence on satisfaction and service quality [35].

About how people create and manage impressions in front of an audience, comparing them with the performance of service providers, it was noticed that they are always looking to create and even maintain good impressions with their target audience [36]. The layout of the facilities, furniture and other tangible elements are responsible for transmitting value-added messages to customers about the service they are purchasing, as it is through them that the customer can also assess the company's positioning, as well as the notion of value of the service offered [37]. According to the Forum of Hotel Operators of Brazil (FOHB), the costs of renovations in the means of accommodation vary according to the scope and state of refurbishment, and the ideal would be to allocate a fund around 5% to replace its assets. This concern with design, according to Schewe and Smith [38], would make it possible to establish a specific style of establishment in the market, in the sense of providing psychological satisfaction (status) in the enjoyment of its services by customers. However, physical appearance alone is not a single decision factor available to a guest. Thus, other factors may also be influencing this decision. Satisfaction, in this case, is a preponderant factor that goes beyond the physical aspect of the enterprise, as other elements are embedded in this vision. However, as satisfaction is practically inseparable from marketing, the concept presented is based on this perspective: The incessant search for ways to please consumers, offering products and services to win and keep them, and profiting from this activity, is what characterizes the market-oriented company that practices marketing concepts efficiently [39].

Quality is a term originating from the Latin *qualitate* which, according to Albrecht [40], is correlated with the way in which a good or a service experience satisfies a need, solves a problem or adds value to the customer. From the point of view of hotel products and services, quality makes it possible for the customer to meet their needs and, for the company that adopts TQM (total quality management), greater possibilities to stand out in the market, as the term quality: It is a real find for companies, in other words, it is the solution found so that a hotel or hotel chain can have a competitive advantage over competitors [41]; [42] and [43]. Total quality management

or “Total Quality Management” consists of a management strategy oriented towards quality in all organizational processes, using the PDCA cycle (Plan Do Check Act Correct) [44]. In this sense, quality gains the status of a very important competitive factor in the provision of tourist services, since in a market full of tourist service providers, a company needs to offer more and better services as customers can choose to obtain the same product tour from another supplier. To be successful, a tourism organization needs to understand the meaning of quality for the future customer, and strive to improve the quality of the service offered. Only then will customers keep returning again.

These and other literary definitions assigned to the term quality are summarized by Garvin [45] in five main approaches, supported by Paladini [46]. The user-based approach is the most comprehensive of all, as, when concerned with the consumer, it is understood that the company is automatically serving the others. In these terms, quality is a competitive weapon based on capturing the desires, needs and expectations of customers, which must be put into practice before the competition [41]; [42] and [43]. Quality can also be often related to the level of customer satisfaction as presented by Kotler [48] and Slack et. al. [49] in three possible situations: When customer expectations are greater than their perceptions: the quality is good; When the customer's expectations are equal to their perceptions: the quality is acceptable. Quality would lie in the identification of service encounters that constitute true decisive moments of interaction with the customer in order to always improve the services provided to customers / users, acting, for example, in the greater qualification of employees, in a process of improvement that continually surprises the clients [41]; [42]. Also according to the same author, hotel companies that only provide basic and essential attributes valued by customers would be doomed to exit the market, as, to establish a strategy with a competitive differential, they must offer their customers unexpected values, such as surprise attributes, for example, by providing a fruit basket or even a flower in the guest's apartment on the occasion of their arrival or special dates. Such surprising attributes, over time, cease to be unexpected and start to be expected by guests, recognized as part of the hotel's own products/services, hence the need to be always innovating to offer unexpected services [41]; [42]. Therefore, the quality of hotel services that deal directly and permanently with several tourists, requires from the employees a lot of initiative, creativity and receptiveness to the customer's wishes, as well as agility and promptness in the execution of services, with time being a variable that is highly charged by your visitors [41]; [42].

In this case, improved service and full customer satisfaction would depend on the establishment's daily occupancy flow related to its ability to recognize the guest's degree of accuracy, as well as its availability to prepare a sales plan that allows it to manage with effectiveness your service capacity. It also emphasizes the use of automated (computerized) systems. These systems, integrated internally, would enable planning and control of the hotel's activities, from the guest's check-in, the collection of extra services consumed by the customer and their check-out, thus streamlining the receptive services provided by the hotel establishment. Therefore, it is clear that the level of professional qualification and mastery of other languages are decisive factors for the tourist to choose to return, because, according to Castelli [41] and [42], in hotel services, the first contact is very important and definitive for the client to measure the quality of the services provided, even because one of the characteristics of the services is that there is, perhaps, no second chance for corrections. Thus, it is clear that mastering other languages constitutes an important differential [50]; [51]; [52].

When experiencing, even if eventually the hospitality of relatives, friends or even a hotel, one has the idea of how a good impression is born from a good reception. The art of hospitality is the first and main rule of hotel management and service providers concerned with delighting their customers. A unique feature in the provision of hotel services would be the promise of selling “pleasant moments”, something intangible, related to the perfect synchrony that must exist between the service and its physical structure. Hospitality would be a wide range of structures, services and attitudes that would be intrinsically related to the well-being of the guest, based on a welcoming environment, constituting an important input for the hotel sector and an often decisive attraction in the choices made by guests [41]; [42]. This aspect is confirmed by Mullins [53], when stating that good hospitality starts with the knowledge of what the guests like, from their arrival, accommodation, from the constant attention to their desires during their stay, to their departure. Relevant points in hotel administration can be to maintain the cleanliness of the establishment, as well as a good posture of front staff and others involved in the service; having the habit of welcoming guests, using welcoming expressions such as: a discreet smile and an appropriate greeting, knowing how to listen to them before anything else; call visiting guests as "Mr. or Madam", and in the case of regular guests, call by name, demonstrating recognition and personalized service; treat guests with a spirit of service, with kindness, enthusiasm, objectivity and promptness in providing service, and with the necessary



information; Recognize and even anticipate the needs, desires and expectations of customers, always ending the service with a "golden key" [41]; [42] and [43]. Therefore, the act of being hospitable when considered as the ability to provide personalized and disciplined service, capable of conveying seriousness and confidence to the customer, must be performed according to Dantas [54] by service providers who, in addition to knowing what they do, must enjoy dealing with people, being friendly and courteous in their activities, as well as knowing how to negotiate with others.

Unlike the sale of a product that has specifications predetermined by the manufacturer (in terms of size, weight, volume, use, etc.) that give consumers, through their handling, a clear idea of the benefit acquired, while the services, due to their intangibility and specific specifications, they can only, according to Crosby [55], be partially measured in subjective terms. This intangibility makes it impossible to adjust stocks and even the possibility of replacing a defective service. The importance of quality in process management is related to the fact that services are not protected by law against copying, which makes them, in turn, more competitive and dynamic than tangible goods. In this sense, the quantification of parameters that characterize and allow the judgment of the performance of a service is supported by ISO 9004-2 (Quality Management and Quality System Elements. Part 2: Service Guidelines), which alerts for importance of the service requirements being clearly defined, with the characteristics observed and evaluated by the customers. Thus, indicating the following essential characteristics: The waiting time for delivery or processing of the service; The ease and capacity of the personnel and material involved; Reliability, safety and hygiene; The competence, courtesy, comfort, aesthetics of the environment, among others [56].

The best way to measure the quality of performance of services provided by hotel organizations is through the perception of their guests/users, obtained through market research [57]. In this case, customer satisfaction can be objectively and subjectively measurable, and the objective models use indicators such as market share, number of complaints, annual revenue, among others, and the subjective ones are based, in turn, in the perception of customer satisfaction regarding their individual needs [58].

#### IV. FINAL CONSIDERATIONS

In the research, it was observed that the male population with a low level of education and age ranging from 20 to 45 years old prevails. It was found that guests who declared having an income of 1 to 3 minimum wages stay

in hotels with lower daily cost and that come from all regions of Brazil with a predominance of guests from the state of Rondônia itself.

It was also found that 80% of the guests of hotels J, C, D, E, G, H, F and I had already visited the city of Guajará-Mirim at least once, despite the deficiencies in infrastructure and services offered to tourists and / or visitors around the city. The guest's stay in the city varies between 2-3 days.

Regarding the 4 factors that would be influencing the choice of hotels, it was found that, significantly, in 50% of the means of accommodation (hotels I, G, J, A and E) the opinion of guests about physical appearance was considered as "little important" (PI). For the hospitality parameter, the result showed that in 40% of the establishments surveyed (hotels A, B, F and G) this parameter was considered as "relatively important" (RI) and for only 10% of this (H and J), hospitality when choosing a means of accommodation, it was considered "important" and "very important".

The Hotel Services Quality Performance Index (IDQSH) in the city of Guajará-Mirim obtained an index of 0.445, considered as "Bad", according to the adopted classification. This result allows us to accept the first research hypothesis where the quality of services would be interfering in the choice of guests, which helps to understand the low level of hotel occupancy in the city throughout the year. Regarding the parameter that analyzes the amount paid for the daily rate for hosting services, it was found that in 30% of the means of accommodation surveyed (hotels A, D and H), it was considered "important" (I) and 20% of the establishments (hotels B and G) "very important" (MI).

The Hotel Services Quality Performance Index (IDQSH) in the city of Guajará-Mirim obtained an index of 0.445, considered as "Bad", according to the adopted classification. This result allows us to accept the hypothesis that the quality of services would interfere with the choice of guests, which helps to understand the low level of hotel occupancy in the city throughout the year.

The result found allows us to point out the ranking among the searched means of hosting. Thus, for those hotels where the quality performance was considered as "Good", they are, in descending order of the IDQSH: A (0.542), F (0.529), and D (0.514). In the quality standard considered "Bad" are the hotels, also in descending order of the IDQSH: H(0.483), B (0.467), E (0.452), C (0.433), G (0.393) and J (0.369). Hotel I, with an index of 0.276, reached the classification that indicated a "Terrible" quality performance.

Therefore, this result validates the hypothesis that the

quality of services offered by the means of accommodation in Guajar-Mirim may be influencing the decision of tourists to no longer enjoy the city's hotel capacity. Despite this precarious situation, guests are attracted to the city because it is located on the border with Bolivia, where there is a shopping attraction in the city of Guayar-Mirim.

From the point of view of endogenous development, it is undeniable that there is recognition that tourism is the main development vector for the region. It was found that for accommodation facilities A, B, C, D, F, G, H and J, guests were unanimous in agreeing with this, and for accommodation facilities E and I, acceptance was 90%. Thus, the survey confirmed that the sector lacks quality, planning and management improvements. There is no way to think about endogenous development without mobilizing and strengthening the entire tourist trade, in the case of this study, the hotel sector. Cooperation between the parties is essential for everyone's survival. This is the closest way to success. Despite recognizing that there are serious deficiencies in the city's infrastructure, which hinders the region's good tourist performance, even so, there are other elements that equally deserve attention.

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